



MUELLER
ENVIRONMENTAL DESIGNS
Proven Under Pressure®



SAFETY DATA SHEETS



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
Before A	4ALL SEASON T30 SELECT	Ingersoll-Rand	Eyes: Flush with water for at least 15 minutes. Hold eyelids open while flushing. If irritation persists get medical attention. Skin: Remove contaminated clothing and wash skin thoroughly with soap and water. Ingestion: Drink 8-10 ounces of water. Do not induce vomiting. Get medical attention immediately. Inhalation: Remove to fresh air. Get medical attention if discomfort persists	Respiratory Protection: Use NIOSH-approved equipment: filter, fume or mist respirator under misty conditions. Skin Protection: For prolonged use, use chemical resistant gloves to minimize skin contact. Eye Protection: Use safety glasses with side shields. Special Handling: If splashing occurs, use apron. Do not get in eyes, on skin or clothing. Wash thoroughly after handling.
Before A	866M Urethane Accel Amercoat	PPG Industries, Inc.	Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators in accordance to 29 CFR 1910.134.
Before A	1050QD Siliconized Acrylic Latex Caulk	SHERWIN-WILLIAMS COMPANY	Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Skin contact: Flush contaminated skin with plenty of water.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessme indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Before A	2000 Flushes Blue plus Bleach	WD-40 Company	Ingestion (Swallowed): Bleach Tablet: Rinse out mouth and give sips of water if the person is able to swallow and is alert. DO NOT INDUCE VOMITING. Get immediate medical attention. Eye Contact: Bleach Tablet: Flush thoroughly with water. Remove contact lenses, if present, after the first 5 minutes and flush again with water for at least 15 -20 minutes. Get immediate medical attention. Skin Contact: Bleach Tablet: Immediately flush skin with plenty of water for 15-20 minutes. Remove any contaminated clothing and rinse immediately with water to dilute concentrated bleach. Launder clothing before reuse. Get immediate medical attention. Note: concentrated bleach in contact with clothing may be a fire hazard. Deodorant Tablet: Wash with soap and water for several minutes. Remove contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention. Inhalation (Breathing): Bleach Tablet: If dust from product is inhaled, move to fresh air.	Appropriate Engineering Controls: No special controls required for normal use. Eye Protection: None normally required. Prevent eye contact. When opening, hold plastic pouch away from face. Skin Protection: Avoid skin contact. Wear rubber gloves when handling product. Respiratory Protection: None required for normal use. For Bulk Processing or Workplace Use the Following Controls are Recommended Appropriate Engineering Controls: Use with adequate general ventilation or local exhaust to minimize exposure levels. Personal Protection: Eye Protection: Chemical safety goggles recommended. Skin Protection: Wear rubber gloves and protective clothing as required to prevent skin contact. Respiratory Protection: None required for handling finished product.
A	AC-1	Lubriplate Lubricants	Inhalation Remove to fresh air. Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Skin contact Wash skin with soap and water. Ingestion Rinse mouth.	Eye/face protection No special protective equipment required. Skin and body protection No special protective equipment required. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.



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A	Acetone	ScienceLab.com	Inhalation: Move to fresh air. If not breathing, perform artificial respiration/CPR. Get medical help immediately. Skin Contact: Remove contaminated clothing. Wash affected area with soap and water for 15 minutes. Seek medical attention if irritation persists. Eye Contact: Flush eyes with large amounts of water for at least 15 minutes, holding eyelids open. Get medical attention immediately. Ingestion: Rinse mouth. DO NOT induce vomiting. Give water if conscious. Get medical help immediately.	Eye Protection: Chemical splash goggles; face shield as additional protection. Hand Protection: Butyl rubber, Silver Shield®, or Barrier® gloves. Nitrile for minimal protection, but verify compatibility. Body Protection: Chemical-resistant lab coat, long pants, closed-toe shoes; apron and boots for larger quantities. Flame-retardant clothing is recommended. Respiratory Protection: Adequate ventilation (local exhaust preferred). If exposure limits are exceeded, use a NIOSH-approved respirator (e.g., full facepiece with organic vapor cartridge). A supplied-air respirator for high exposures.
A	Acrolon 218	THE SHERWIN-WILLIAMS COMPANY	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Ingestion: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
A	Alex Plus Acrylic Latex Caulk Plus Silicone - Clear	DAP Global Inc.	INHALATION: Material is not likely to present an inhalation hazard at ambient conditions. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. SKIN CONTACT: In case of contact, wash skin immediately with soap and water. EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately. INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.	RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. SKIN PROTECTION: Rubber gloves. EYE PROTECTION: Goggles or safety glasses with side shields.
A	Amercoat 235	PPG Industries Sales, Inc. and PPG Coatings (Philippines), Inc.	Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.



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A	Amercoat 450H	PPG Industries, Inc.	Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
A	Amercoat 880	PPG Industries, Inc.	Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
A	Amerlock 400 Cure	PPG Industries (Singapore) Pte. Ltd	Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin Contact: contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
A	AMSOIL Signature Series SAE 5W-20, 5W-30, 5W-50 100% Synthetic Motor Oil	AMSOIL INC	Inhalation Remove person to fresh air and keep comfortable for breathing.	Eye/face protection If there is a risk of contact: Wear safety glasses with side shields (or goggles). Hand protection If there is a risk of contact: Wear suitable gloves. Skin and body protection If there is a risk of contact: Wear suitable protective clothing. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
A	AMSOIL Signature Series SAE 5W-20, 5W-30, 5W-50 100% Synthetic Motor Oil	AMSOIL INC.	Inhalation Remove person to fresh air and keep comfortable for breathing. Eye contact Remove contact lenses, if present and easy to do. Continue rinsing. Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists. Skin contact Wash skin with soap and water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists. Ingestion Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.	Eye/face protection If there is a risk of contact: Wear safety glasses with side shields (or goggles). Hand protection If there is a risk of contact: Wear suitable gloves. Skin and body protection If there is a risk of contact: Wear suitable protective clothing. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.



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A	Anti-Spatter	Radnor	INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious. INGESTION: Unlikely due to being in aerosol form. Should actual ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. EYE CONTACT: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment. SKIN CONTACT: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.	EYE PROTECTION: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact could occur, chemical splash proof goggles are recommended. SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex® gloves or other clothing impervious to the ingredient listed in Section 2.
A	ARMEXTM Blast Media	Church & Dwight	Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists. Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. Ingestion: Rinse mouth. Do not induce vomiting. Obtain medical attention.☹	Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Materials for Protective Clothing: Chemically resistant materials and fabrics. Hand Protection: Wear protective gloves. Eye Protection: Chemical safety goggles. Skin and Body Protection: Wear suitable protective clothing. Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
A	ARMEX™ Profile Blast Media	Church & Dwight	Inhalation: When symptoms occur: go into open air and ventilate suspected area. Skin Contact: Brush off loose particles from skin. Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists. Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists. Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention if a large amount is swallowed.	Personal Protective Equipment: Gloves. Safety glasses. Dust formation: dust mask. Materials for Protective Clothing: Chemically resistant materials and fabrics. Hand Protection: Wear chemically resistant protective gloves. Eye Protection: Chemical goggles or safety glasses. Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.
A	Autoguard Windshield Washer Fluid -20°F	Warren	First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. First-aid measures after skin contact: Wash immediately with lots of water. Soap may be used.	Personal protective equipment: Avoid all unnecessary exposure. Gloves. Safety glasses. Hand protection: Wear protective gloves. Eye protection: Chemical goggles or safety glasses. Skin and body protection: Wear suitable protective clothing. Respiratory protection: In case of inadequate ventilation wear respiratory protection. Wear appropriate mask.
B	Bondo Fiberglass Resin	3M	Inhalation: Remove person to fresh air. If you feel unwell, get medical attention. Skin Contact: Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse. Eye Contact: Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention. If Swallowed: Rinse mouth. Do not induce vomiting. Get immediate medical attention.	Eye/face protection: Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Full Face Shield, Indirect Vented Goggles Skin/hand protection: Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Gloves made from the following material(s) are recommended: Butyl Rubber, Fluoroelastomer, Neoprene. Respiratory protection: An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program.

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C	Carboguard 635 Part B	Carboline Company	First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician. First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Launder clothing before reuse. If rash or irritation develops, consult a physician. First Aid - Inhalation: If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe. First Aid - Ingestion: If swallowed do not induce vomiting. Seek immediate medical attention.	Respiratory Protection: Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use. For silica containing coatings in a liquid state, and/or if no exposure limits are established in Section 2 above, supplied air respirators are generally not required. Skin Protection: Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure. Eye Protection: Recommend safety glasses with side shields or chemical goggles to avoid eye contact.
C	Carboline Urethane Converter 811	Akis Paint and Chemical Inc.	Inhalation If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. If spray/mist has been inhaled, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Rinse nose and mouth with water. Consult a physician for specific advice. Keep affected person warm and at rest. Get medical attention if symptoms are severe or persist. Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. Skin contact Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues. Eye contact Remove affected person from source of contamination. Remove contact lenses, if present and easy to do. Continue rinsing. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.	Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Other skin and body protection Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
C	Carboline Carbomastic 615 Comp. A Red	Akis Paint and Chemical Inc.	Inhalation If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. First aid personnel should wear appropriate protective equipment during any rescue. If spray/mist has been inhaled, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Rinse nose and mouth with water. Keep affected person warm and at rest. Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. Skin contact Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues. Eye contact Remove affected person from source of contamination. Remove contact lenses, if present and easy to do. Continue rinsing. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.	Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Other skin and body protection Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation/assessment indicates eye contact is possible. Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Other skin and body protection Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.



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C	CARBOMASTIC 615 PART B	Carboline Company	First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician. First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Launder clothing before reuse. If rash or irritation develops, consult a physician. First Aid - Inhalation: If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe. First Aid - Ingestion:	Respiratory Protection: Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. Skin Protection: Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure. Eye Protection: Recommend safety glasses with side shields or chemical goggles to avoid eye contact.
C	Carbothane 134 HG Part A Carboline	Carboline Company	AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention. AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician. AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.	RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. EYE PROTECTION: Safety glasses with side-shields.
C	CIMCOOL Metal Working fluid Concentrate S	CIMCOOL® Industrial Products LLC	Inhalation: Move to fresh air. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Skin contact: Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Eye contact: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Ingestion: Rinse mouth thoroughly. Do not give liquids. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.	Eye/face protection: Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended. Skin protection - Hand protection Use protective gloves made of: Nitrile. Other Wear appropriate chemical resistant clothing. Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.
C	Clorox Bleach	The Clorox Company	General Advice Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance. Eye Contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Skin Contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Inhalation Move to fresh air. If breathing is affected, call a doctor. Ingestion Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.	Eye/Face Protection If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield. Skin and Body Protection Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt. Respiratory Protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
C	Clorox Commercial Solutions® Clorox® Disinfecting Wipes - Fresh Scent	Clorox Professional Products Company	Inhalation Remove to fresh air. Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Skin contact Wash skin with soap and water. Ingestion Clean mouth with water and drink afterwards plenty of water.	Eye/face protection No special protective equipment required. Skin and body protection No special protective equipment required. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
C	Comet Cleaner with Bleach	Procter & Gamble Inc.	Eye contact: Rinse with plenty of water. Get medical attention immediately if irritation persists. Skin contact: Rinse with plenty of water. Get medical attention if irritation develops and persists. Ingestion: Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur. Inhalation: Inhalation: Move to fresh air. If symptoms persist, call a physician.	Eye Protection Distribution, Workplace and Household Settings: No special protective equipment required. Hand Protection Distribution, Workplace and Household Settings: No special protective equipment required.



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C	Cut-N-Cool	Lubriplate	Inhalation No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. Ingestion No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues. Skin Contact No specific recommendations. Rinse with water. Get medical attention if any discomfort continues. Eye contact Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.	Eye/face protection No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Hand protection No specific hand protection recommended. Large Spillages: Wear protective gloves. Other skin and body protection Wear appropriate clothing to prevent repeated or prolonged skin contact. Respiratory protection No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
C	Cutter Insect Repellent	Spectrum, A Division of United Industries	Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. Skin Contact: In case of contact, wash skin with plenty of water. If skin irritation or redness develops, seek medical attention. Eye Contact: In case of contact, flush eyes with plenty of water for several minutes. Remove contact lenses, if worn. If irritation persists, get medical attention. Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel.	Eye/face protection: None required for normal use. Avoid eye contact. Skin and body protection: None required under normal use conditions. Respiratory protection: None required under normal use conditions. General hygiene considerations: Do not eat, drink or smoke where material is handled, processed or stored. Wash hands after handling.
C	Cutting Oil Thread Cutting Lubricant	CRC Industries, Inc.	Inhalation Move to fresh air. Call a physician if symptoms develop or persist. Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists. Eye contact Rinse with water. Get medical attention if irritation develops and persists. Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Direct contact with eyes may cause temporary irritation.	Eye/face protection Wear safety glasses with side shields (or goggles). Skin protection Hand protection Wear protective gloves such as: Nitrile. Neoprene. Respiratory protection: If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge.
D	D-100 Developer Spray Can	Sherwin Inc.	Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation. Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Get immediate medical attention. Ingestion: Clean mouth with water. Keep respiratory tract clear. Do NOT induce vomiting or attempt chemical neutralization. If symptoms persist, call a physician.	Personal Protective Equipment: Chemical resistant gloves; Chemical safety glasses; General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters; Impervious clothing.
D	DAP Flexible Floor Patch and Leveler	DAP Global Inc.	FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist. FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately. FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.	RESPIRATORY PROTECTION: When concentrations exceed the exposure limits specified, use of a NIOSH-approved dust, mist and fume respirator is recommended. Where the protection factor of the respirator may be exceeded, use of a full facepiece, supplied air, or Self Contained Breathing Apparatus (SCBA) may be necessary. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. SKIN PROTECTION: Wear protective gloves. EYE PROTECTION: Safety glasses with side-shields.
D	DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684	Dow Corning Corporation	Eye: Immediately flush with water for 15 minutes. Get medical attention. Skin: Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist. Inhalation: No first aid should be needed. Oral: No first aid should be needed.	Eyes: Use proper protection - safety glasses as a minimum. Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended. Suitable Gloves: Silver Shield(R). 4H(R). Inhalation: No respiratory protection should be needed.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
D	Delo 400 XLE SAE 10W-30	Chevron Products Company	Eye: No specific first aid measures are required. Skin: No specific first aid measures are required. Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice. Inhalation: No specific first aid measures are required.	Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted. Skin Protection: Wear chemical personal protective equipment (PPE) to prevent skin contact. Air purifying respirator - If airborne concentration limits exceed the applicable occupational exposure limit, but are below the maximum use concentration. Vapors only: organic vapor cartridge (filter type A3 per EN 529:2005).
D	DEXRON III/MERCON ATF	Lubriplate Lubricants Company Headquarters	Inhalation Remove to fresh air. Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Skin contact Wash skin with soap and water. Ingestion Rinse mouth.	Eye/face protection No special protective equipment required. Skin and body protection No special protective equipment required. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
D	DIAMOND-CLAD® Clear Coat Urethane Finish (Part B)	THE SHERWIN-WILLIAMS COMPANY	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous.	Eye/face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
D	DIAMOND-CLAD® Clear Coat Urethane Finish Part C Clear Catalyst	THE SHERWIN-WILLIAMS COMPANY	Eye contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Skin contact: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Ingestion: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.
D	Diesel Fuel	Various	Inhalation: Move to fresh air. If not breathing, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Skin Contact: Immediately wash with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Get medical attention. Ingestion: DO NOT INDUCE VOMITING. Immediately call a poison center or doctor. If conscious, rinse mouth. Never give anything by mouth to an unconscious person. Aspiration into the lungs can cause severe and potentially fatal chemical pneumonitis.	Eye/Face Protection: Safety glasses or goggles are recommended, especially where splashing is possible. Skin Protection: Gloves: Nitrile, neoprene, or PVC gloves are recommended. Protective Clothing: Chemical protective clothing (e.g., TyChem®, Saranex® or equivalent) to prevent skin contact. Respiratory Protection: Typically not needed with adequate ventilation. However, if airborne concentrations exceed exposure limits, or in confined/poorly ventilated spaces, a NIOSH-approved respirator may be required. Other: Use explosion-proof electrical/ventilating/lighting equipment and non-sparking tools. Take precautionary measures against static discharge.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
D	DOT 3 Brake Fluid	Complex Chemical Co.	Eye Contact: Immediately flush eyes with plenty of water for at least 15-30 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Get immediate medical attention. Skin Contact: Remove contaminated clothing. Wash all affected and exposed areas thoroughly with soap and water. If irritation or redness develops or persists, get medical attention. Inhalation: Remove to fresh air. If effects occur (e.g., respiratory irritation), seek medical attention. Ingestion: DO NOT INDUCE VOMITING. Immediately call a poison center or doctor. If the person is conscious, rinse mouth with a small amount of water and give one glass of water to dilute.	Eye/Face Protection: Chemical splash goggles or a face shield are essential due to the risk of serious eye damage. Eyewash stations should be readily available. Skin Protection: Gloves: Chemical-resistant gloves (e.g., nitrile, neoprene, or butyl rubber) are recommended to prevent prolonged or repeated skin contact. Protective Clothing: Impervious protective clothing (e.g., a chemical-resistant apron or overalls) may be necessary to prevent skin contact, especially during tasks with a higher risk of splashing. Respiratory Protection: Typically not required under normal use conditions with adequate ventilation.
D	DP-40 Sherwin Dubl Chek	Sherwin Inc.	Inhalation: Supply fresh air. If required, provide artificial respiration. Keep the patient warm. Consult a doctor if symptoms persist. In case of unconsciousness, place the patient stably in a side position for transportation. Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. Remove contaminated clothing. Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Remove contact lenses if present and easy to do. Get immediate medical attention. Ingestion: Clean mouth with water and, if conscious, drink plenty of water afterwards. Keep the respiratory tract clear. DO NOT INDUCE VOMITING or attempt chemical neutralization.	Eye/Face Protection: Chemical safety glasses are recommended. If there's a possibility of spraying or splashing, chemical splash goggles or a face shield should be used. Eyewash stations should be available. Skin Protection: Gloves: Chemical-resistant gloves (e.g., nitrile, neoprene, or impervious gloves) are required to prevent skin contact. Protective Clothing: Impervious clothing (e.g., a chemical-resistant apron or coveralls) is recommended to prevent skin contact, especially with bulk liquid or in situations with a higher risk of exposure. Respiratory Protection: Typically, no personal respiratory protective equipment is normally required with adequate general and local exhaust ventilation. However, in cases of vapor formation, mists, or aerosols, or where concentrations exceed exposure limits, a NIOSH-approved organic vapor respirator with dust, mist, and fume filters should be used.
D	Dura-Plate 235	The Sherwin-Williams Company	Eye Contact: Immediately flush eyes with plenty of water for at least 15-20 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Seek immediate medical attention (call a poison center or physician). Chemical burns to the eyes require prompt medical treatment. Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash with plenty of soap and water. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing thoroughly with water before reuse. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Ingestion: DO NOT INDUCE VOMITING. Immediately call a POISON CENTER or physician. Rinse mouth with water. If the person is conscious, give small quantities of water to drink.	Eye/Face: Chemical splash goggles and/or face shield. Eyewash station. Skin: Chemical-resistant gloves (nitrile, neoprene, butyl rubber) and chemical-resistant protective clothing (e.g., coveralls, apron), plus safety footwear. Respiratory: Adequate ventilation (local exhaust). If limits exceeded or during spraying/sanding, use a NIOSH-approved respirator (organic vapor with particulate filter, or supplied-air for high concentrations). Other: Use explosion-proof equipment, non-sparking tools, and practice good hygiene.
E	Enerpac LX70 Hydraulic Oil	U.S. Lubricants, a Division of U.S. Venture Inc.	Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if eye irritation develops or persists. Skin Contact: Wash thoroughly with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse. Special note: If product is injected under pressure into or under the skin, or into any part of the body, a physician should immediately evaluate the individual, regardless of wound appearance. Inhalation: Remove exposed person to fresh air. If adverse effects are observed (e.g., breathing difficulty), get medical attention. Ingestion: DO NOT INDUCE VOMITING! If conscious, give 2 glasses of water. Get immediate medical attention.	Eye/Face Protection: Goggles. Eyewash stations should be available. Hand Protection: Impervious gloves (e.g., nitrile, neoprene). Skin and Body Protection: Suitable protective clothing to prevent prolonged or repeated skin contact. Respiratory Protection: No protective equipment is generally needed under normal use conditions. If exposure limits are exceeded or irritation occurs, ventilation and evacuation may be required, or a respirator may be necessary.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
E	Ethylene Glycol	Sigma-Aldrich	Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. Skin Contact: Wash off immediately with plenty of soap and water. Remove contaminated clothing and shoes. If irritation develops or persists, consult a physician. Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Get immediate medical attention. Ingestion: DO NOT INDUCE VOMITING. Immediately call a POISON CENTER or physician. Rinse mouth with water. If conscious, give a small amount of water to drink (e.g., 2 glasses) to dilute the material.	Eye/Face Protection: Chemical safety glasses with side shields are the minimum. Chemical splash goggles or a face shield should be worn where there's a risk of splashing. An eyewash station should be readily available. Skin Protection: Gloves: Chemical-resistant gloves are essential. Recommended materials often include nitrile, neoprene, butyl rubber, or PVC. Protective Clothing: Impervious protective clothing (e.g., chemical-resistant apron, lab coat, or coveralls) should be worn to prevent skin contact. Respiratory Protection: Generally, no special respiratory protection is needed with adequate ventilation. However, if airborne concentrations exceed occupational exposure limits (e.g., when misting, spraying, or in poorly ventilated areas), a NIOSH-approved respirator with an organic vapor cartridge is required.
E	EXXSOL D80 Petroleum Solvent	Univar Solutions USA	Inhalation: Remove from further exposure to fresh air. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Skin Contact: Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. Eye Contact: Flush thoroughly with water. If irritation occurs, get medical assistance. Ingestion: Seek immediate medical attention. DO NOT INDUCE VOMITING! If ingested, material may be aspirated into the lungs and cause chemical pneumonitis, which can be severe and potentially fatal. Treat appropriately by a physician.	Eye/Face Protection: Safety glasses with side shields are recommended. Chemical goggles are recommended if splashes or eye contact are likely. Skin Protection: Gloves: Wear protective, chemical-resistant gloves (e.g., nitrile or neoprene) to prevent prolonged or frequent skin contact. Protective Clothing: Chemical and oil-resistant apron or protective clothing (e.g., coveralls) are recommended to prevent skin exposure, especially for prolonged contact or frequent handling. Respiratory Protection: Not ordinarily required under normal conditions with adequate ventilation. However, if airborne concentrations exceed exposure limits (e.g., in poorly ventilated areas or during mist/vapor generation), a NIOSH-approved respirator with organic vapor cartridges may be needed.
F	Fabuloso Lavender	Colgate-Palmolive Co	Inhalation: Remove victim to fresh air. If symptoms (like respiratory irritation) persist, get medical attention. Skin Contact: Flush skin with large amounts of water. If irritation develops and persists, get medical attention. Eye Contact: Flush eyes with water for at least 15 minutes. If eye irritation develops or persists, get medical attention. Ingestion: Drink 8 ounces of clear water (or 1-2 glasses of clear liquid). Get medical attention. DO NOT INDUCE VOMITING unless directed by medical personnel.	Eye Protection: Chemical goggles may be needed if a splash is likely. An eyewash station is a good idea to have available. Skin Protection: Protective gloves may be required for prolonged skin contact. Impervious clothing is also recommended for industrial environments to prevent skin exposure. Respiratory Protection: No personal respiratory protective equipment is normally required with adequate ventilation.
F	Flexible Polyurethane Foam	Woodbridge Foam Corporation	Inhalation: Move to fresh air. If respiratory symptoms (cough, difficulty breathing) occur, or if exposed to fumes/vapors, seek medical attention. Skin Contact: Wash immediately with soap and water. If exposed to liquid components, remove clothing and seek medical attention for irritation/rash. Eye Contact: Flush with water for at least 15 minutes. Get immediate medical attention, especially for liquid exposure. Ingestion: DO NOT INDUCE VOMITING. Call a POISON CENTER or physician immediately. Rinse mouth. Give water if conscious.	Eye/Face: Chemical splash goggles, face shield. Eyewash/safety shower. Skin: Chemical-resistant gloves (nitrile, neoprene, butyl), protective clothing. Respiratory: Local exhaust ventilation. If limits exceeded or during spraying, NIOSH-approved respirator (organic vapor with particulate, or supplied-air for high levels/isocyanates). For Cured, Solid Foam (cutting/sanding): Eye/Face: Safety glasses (goggles for significant dust). Skin: No specific PPE for the foam itself (general gloves ok). Respiratory: NIOSH-approved particulate respirator if dust is generated.
F	Fresh Step Total Control Cat Litter	The Clorox Sales Company	Inhalation: Move victim to fresh air. If breathing problems develop, call a doctor. Skin Contact: Wash hands thoroughly after handling. If skin irritation persists, call a physician. Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do, after the first 5 minutes, then continue rinsing. Get medical attention if irritation develops and persists. Ingestion: Drink 1 or 2 glasses of water. Get medical attention if symptoms occur.	Eye Protection: Safety glasses or chemical goggles are recommended, especially if dust generation or splashing is likely. An eyewash station should be available. Skin Protection: Gloves (e.g., rubber or neoprene) are recommended for prolonged or frequent contact. Good hygiene, like washing hands after handling, is also emphasized. Respiratory Protection: No special respiratory protection is usually needed under normal use with adequate ventilation. However, if airborne dust levels exceed exposure limits or if irritation occurs, a NIOSH-approved particulate respirator (like a dust mask) should be worn. General Hygiene: Wash hands thoroughly after handling, particularly after handling used litter due to the risk of toxoplasmosis. Avoid contact with skin and eyes.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
G	Germ Attack Hand Sanitizer	Natural Essentials	Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. If symptoms persist, get medical attention. Ingestion: Do NOT induce vomiting. If swallowed, rinse mouth with water and get medical attention or advice. Never give anything by mouth to an unconscious person. Skin: If irritation is experienced, flush with water. If irritation persists, get medical attention. Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	Eye Protection: While "none required under normal conditions" is often stated, if there's a risk of splashing, safety glasses with side shields or chemical goggles may be recommended to prevent eye irritation. Skin Protection: For normal use, no special skin protection is needed. However, if there's a risk of prolonged or repeated contact, or in case of large spills, protective gloves might be suggested. Respiratory Protection: Generally, no respiratory protection is needed for normal use. If symptoms are experienced or in cases of large vapor concentrations (e.g., in a confined space), ensuring adequate ventilation or, in extreme cases, respiratory protection (such as an approved respirator) might be considered.
G	Gorilla Sealant Clear (100% Silicone Sealant)	The Gorilla Glue Company	Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists. Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.	Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Materials for Protective Clothing: Chemically resistant materials and fabrics. Hand Protection: Wear protective gloves. Eye Protection: Chemical safety goggles. Skin and Body Protection: Wear suitable protective clothing. Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
H	Heat-Flex Hi-Temp 1200	The Sherwin-Williams Company	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
H	HESS 10W30 Motor Oil	Hess Corporation	First Aid: Eyes If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is visual difficulty, seek medical attention. First Aid: Skin Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse. First Aid: Ingestion Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down.	Personal Protective Equipment: Hands Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product. Personal Protective Equipment: Eyes Safety glasses or goggles are recommended where there is a possibility of splashing or spraying. Personal Protective Equipment: Skin and Body To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Wear normal work clothing covering arms and legs.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
I	Ideal Aqua Gel II	IDEAL INDUSTRIES, INC.	Inhalation: Obtain medical attention if there are signs of breathing difficulties. Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and thoroughly clean before reuse. Eye contact: Flush eyes with water for at least 15 minutes, occasionally lifting eyelids. If pain or redness persists after flushing, obtain medical attention. Ingestion: Do not induce vomiting. Consult physician or local poison control center.	Eye/face protection: None normally required, but the use of OSHA compliant safety glasses or splash goggles recommended. Skin and Hand protection: None normally needed -Neoprene if necessary. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Respiratory protection: None normally required. Other: Eye wash / eye bath in the work area is recommended but not necessary.
I	INTERCURE 4500 BASE LIGHT PART A	Akzo Nobel Coatings	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easy to do. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Ingestion: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel.	Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Respiratory protection: Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.
I	Isopropyl Alcohol 91 Percent	Hydrox Laboratories	Eyes: Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Ingestion: If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.	Eyes: Chemical resistant goggles Skin: Rubber or vinyl gloves
K	K-17 Spray Sherwin Dubl-Chek	Sherwin Inc.	Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation. Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Get immediate medical attention. Ingestion: Clean mouth with water. Keep respiratory tract clear. Do NOT induce vomiting or attempt chemical neutralization. If symptoms persist, call a physician.	Personal Protective Equipment: Chemical resistant gloves; Chemical safety glasses; General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters; Impervious clothing.
K	KEM® 400 Enamel - Acrylic Modifier	Sherwin-Williams S.A. de C.V.	Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Ingestion: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.	Eye/face protection: Use safety eyewear designed to protect against splash of liquids. Gloves: Gloves for short term exposure/splash protection (less than 10 min.): Nitrile>0.12 mm Gloves for splash protection need to be changed immediately when in contact with chemicals. Respiratory protection: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387).



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
K	Klean Strip Odorless Mineral Spirits	W. M. Barr	Inhalation: If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered. Skin contact: Wash with soap and large quantities of water for at least 15 minutes. Seek medical attention if irritation from contact persists. Eye contact: Immediately flush eyes with water, remove any contact lens, continue flushing with water for at least 15 minutes. Get medical attention. Ingestion: Do not induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.	Eye Protection: Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals. Protective Gloves: Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.
L	Loctite 2 in 1 seal and bond premium	Henkel Corporation	Eye Contact: Flush with water for at least 15 minutes. Call a physician if irritation develops and persists. Skin Contact: Wash thoroughly with soap and water. Inhalation: If affected by inhalation, remove to fresh air and get medical attention. Ingestion: Do not induce vomiting; call a physician or Poison Control Center immediately.	Eye/Face Protection: Safety glasses or chemical splash goggles. An eyewash station should be available. Skin Protection: Protective gloves (e.g., rubber or neoprene) are recommended, especially for prolonged contact. Respiratory Protection: No special respiratory protection is normally required with adequate ventilation. If used in poorly ventilated areas or if vapors become an issue, a respirator (e.g., organic vapor cartridge type) may be needed.
L	Loctite PL marine fast cure adhesive sealant	Henkel Corporation	Eye Contact: Flush with plenty of water for at least 15 minutes. If irritation persists, call a physician. Skin Contact: Wash thoroughly with soap and water. If skin irritation or rash occurs, get medical attention. Remove contaminated clothing. Inhalation: Move to fresh air. If symptoms persist, seek medical advice. Ingestion: DO NOT INDUCE VOMITING. Call a physician or Poison Control Center immediately.	Eye/Face Protection: Safety goggles or safety glasses with side shields. Skin Protection: Impermeable gloves and protective clothing to prevent skin contact. Respiratory Protection: Not generally required with adequate ventilation. If fumes/vapors/spray are generated and exceed limits, use a suitable respirator. General Hygiene: Wash hands after handling. Do not allow contaminated clothing out of the workplace.
L	Lysol Disinfectant Spray	Reckitt Benckiser (Canada) Inc.	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Wash with plenty of soap and water. If irritation or rash occurs, get medical attention. Remove contaminated clothing. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING.	Eye/Face: Safety glasses or goggles are recommended if splashing is possible. Skin: Protective gloves are recommended for prolonged or repeated contact. Respiratory: Use in a well-ventilated area. If ventilation is insufficient or irritation occurs, use a respirator (e.g., organic vapor). Other: Keep away from heat/ignition sources. Do not pierce or burn container.
M	Macropoxy 646	THE SHERWIN-WILLIAMS COMPANY	Eye Contact: Immediately flush with plenty of water for at least 15 minutes, holding eyelids open. Get immediate medical attention. Skin Contact: Immediately take off contaminated clothing. Wash with plenty of soap and water. If irritation or rash occurs, get medical attention. Inhalation: Remove to fresh air. If feeling unwell, call a POISON CENTER or physician. If not breathing, provide artificial respiration. Ingestion: Immediately call a POISON CENTER or physician. DO NOT INDUCE VOMITING (aspiration hazard). Rinse mouth; never give anything by mouth to an unconscious person.	Eye/Face: Chemical splash goggles and face shield. Eyewash station. Skin: Chemical-resistant gloves (e.g., nitrile, neoprene, butyl rubber) and full chemical-resistant protective clothing. Respiratory: Use in well-ventilated areas with local exhaust. If exposure limits are exceeded or during spraying/sanding, use a NIOSH-approved respirator (organic vapor with particulate filter, or supplied-air for high concentrations). Other: Keep away from heat/ignition sources. Use explosion-proof equipment and non-sparking tools. Take precautions against static discharge. Practice good hygiene.
M	Magnaflux Spotcheck SKD-S2 Aerosol	Magnaflux	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. If breathing stops, assist ventilation. Skin Contact: Immediately flush skin with plenty of water. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: Immediately call a POISON CENTER or doctor. DO NOT INDUCE VOMITING.	Eye/Face: Safety glasses with side-shields (or goggles). Skin: Chemical-resistant gloves and suitable protective clothing. Respiratory: Use only outdoors or in well-ventilated areas. If ventilation is insufficient, wear a suitable respirator (e.g., organic vapor). Other: Keep away from heat/sparks/open flames. Do not spray on open flame or pierce/burn container. Use non-sparking tools and explosion-proof equipment. Take static discharge precautions.
M	Magnaflux Spotcheck SKL-SP2 Aerosol	Magnaflux	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. If breathing stops, assist ventilation. Skin Contact: Immediately flush skin with plenty of water. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: Immediately call a POISON CENTER or doctor. DO NOT INDUCE VOMITING.	Eye/Face: Safety glasses with side-shields (or goggles). Skin: Chemical-resistant gloves and suitable protective clothing. Respiratory: Use only outdoors or in well-ventilated areas. If ventilation is insufficient, wear a suitable respirator (e.g., organic vapor). Other: Keep away from heat/sparks/open flames. Do not spray on open flame or pierce/burn container. Use non-sparking tools and explosion-proof equipment. Take static discharge precautions.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
M	Magnavis White Contrast Paint WCP-2	Magnaflux	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: If irritation occurs, flush skin with plenty of water. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion: DO NOT INDUCE VOMITING unless directed by medical personnel. Get medical advice/attention if feeling unwell.	Eye/Face: Wear eye protection/face protection (e.g., safety glasses or goggles). Skin: Wear protective gloves (e.g., nitrile rubber / neoprene) if hand exposure is unavoidable. Respiratory: Use only outdoors or in a well-ventilated area. If sprayed in an enclosed, unventilated space, a respirator with filter is needed. Other: Keep away from heat/sparks/open flames. Do not spray on an open flame. Pressurized container: Do not pierce or burn. Take precautionary measures against static discharge.
M	Magnavis 7HF	Magnaflux	Inhalation: Move to fresh air. If dizzy or nauseated, get medical attention. Skin Contact: Wash thoroughly with soap and water. Use soothing lotion if irritation occurs. Eye Contact: Rinse carefully under eyelids with plenty of water. Ingestion: DO NOT INDUCE VOMITING. Accidental small ingestion is not expected to cause significant harm, but for severe cases, contact a physician or poison control center.	Eye/Face: Safety glasses (or goggles). Skin: Nitrile rubber or neoprene gloves if hand exposure is unavoidable. Respiratory: Use where ventilation will carry spray mist away from occupied areas. If insufficient ventilation, wear a suitable respirator. Other: Keep away from heat/sparks/open flames. Do not spray near arcs or flames. Pressurized container: do not pierce or burn. Take static discharge precautions.
M	Magnavis WCP-2 Contrast Paint	Magnaflux	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: If irritation occurs, flush skin with plenty of water. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion: DO NOT INDUCE VOMITING unless directed by medical personnel. Get medical advice/attention if feeling unwell.	Eye/Face: Wear eye protection/face protection (e.g., safety glasses or goggles). Skin: Wear protective gloves (e.g., nitrile rubber / neoprene) if hand exposure is unavoidable. Respiratory: Use only outdoors or in a well-ventilated area. If sprayed in an enclosed, unventilated space, a respirator with filter is needed. Other: Keep away from heat/sparks/open flames. Do not spray on an open flame. Pressurized container: Do not pierce or burn. Take precautionary measures against static discharge.
M	MARVEL AIR TOOL OIL	Turtle Wax Limited	Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Call a physician if feeling unwell. Skin Contact: Immediately wash exposed area with soap and water. Remove contaminated clothing. If irritation persists, get medical attention. Eye Contact: Flush eyes with large amounts of water for at least 15 minutes, lifting eyelids. Get medical attention if irritation persists. Ingestion: DO NOT INDUCE VOMITING. Keep person quiet and warm. Get medical attention immediately. Aspiration into lungs can cause chemical pneumonitis.	Eye/Face: Splash goggles or safety glasses. Skin: Chemically resistant gloves and suitable protective clothing. Respiratory: Provide sufficient ventilation. If exposure levels are exceeded, wear an approved respirator (e.g., organic vapor). Other: Keep away from heat/sparks/open flames. Use non-sparking tools and explosion-proof equipment. Take precautions against static discharge.
M	Matheson Select Anti-Splatter and Nozzle Shield	CRC Industries, Inc.	Eyes: Flush with water for 15 minutes. Skin: Wash area with soap and water. Ingestion: Drink water, DO NOT INDUCE VOMITING. Inhalation: Remove to fresh air. If breathing has stopped, start CPR.	Eye/Face: Face shield and goggles. Skin: Polyfluorinated polyethylene gloves are suggested. Respiratory: Local exhaust ventilation sufficient to maintain TLV (Threshold Limit Value). Respiratory protection is advised when concentrations exceed exposure limits. Other: Store in a cool, dry, well-ventilated area away from heat and ignition sources. Keep containers closed. Do not enter confined spaces without proper procedures. Wash thoroughly after handling.
M	Medium Strength Threadlocker Blue Gel 10 Gr	ITW Permatex, Inc.	Inhalation: Move to fresh air. If feeling unwell or breathing difficulties, get medical attention. Skin Contact: Wash immediately with plenty of soap and water. Remove contaminated clothing. If irritation or rash occurs, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: DO NOT INDUCE VOMITING. Immediately call a POISON CENTER or physician. Rinse mouth if conscious.	Eye/Face: Safety glasses or goggles. Eyewash station available. Skin: Chemical-resistant gloves (e.g., neoprene, nitrile) and protective clothing (e.g., apron, long sleeves). Respiratory: Use in well-ventilated area. If exposure limits are exceeded or irritation occurs, use a NIOSH-approved respirator (organic vapor with particulate filter). General: Wash hands thoroughly after handling. Obtain special instructions before use and understand all safety precautions.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
M	Micro-Kleen Surface Disinfectant	Micro-Scientific, LLC	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Immediately flush skin with plenty of water. Remove contaminated clothing. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion: DO NOT INDUCE VOMITING unless directed. Call a POISON CENTER or doctor if feeling unwell.	Eye/Face: Safety glasses (splash-proof chemical goggles and face shield for higher risk). Eyewash available. Skin: Protective gloves (e.g., suitable chemical-resistant material) and suitable protective clothing. Respiratory: Use with adequate ventilation. If ventilation is insufficient or irritation occurs, use appropriate respiratory equipment. Other: Keep away from heat, sparks, open flames. Take precautionary measures against static discharge.
M	Miss Muffets Revenge	Wet & Forget Inc	Inhalation: Move to fresh air. If not breathing, give artificial respiration. Get medical attention if feeling unwell. Skin Contact: Wash off with soap and plenty of water. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. Call a poison control center or physician if irritation persists. Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a poison control center or doctor/physician.	Eye/Face: Chemical goggles or safety glasses. Skin: Wear protective gloves (e.g., nitrile, PVC, or rubber). Protective clothing is also recommended. Respiratory: Wear approved mask/respirator if ventilation is insufficient. General: Wash hands before eating, drinking, or smoking and when leaving work. Avoid unnecessary exposure.
M	Mobil 1 syn gear lube ls 75w-90	EXXON MOBIL CORPORATION	Inhalation: Generally not needed. If symptoms occur, move to fresh air and get medical advice. If fire decomposition products are inhaled, medical surveillance for 48 hours may be needed. Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. If injected under pressure, seek immediate medical attention (surgical emergency), regardless of wound appearance. Eye Contact: Flush with plenty of water for at least 15 minutes. If irritation persists, get medical attention. Ingestion: Usually not required. If large quantities are swallowed, get medical advice. DO NOT induce vomiting.	Eye/Face: Safety glasses with side shields. Skin: Impervious gloves (e.g., nitrile) and protective clothing to prevent prolonged contact. Respiratory: Not normally required with adequate ventilation. If mist/aerosol is generated above exposure limits, use an approved respirator (e.g., particulate filter). General: Practice good industrial hygiene. Be extremely cautious of high-pressure leaks.
M	MOBIL DTE 25 Ultra Oil	EXXON MOBIL CORPORATION	Inhalation: Not usually needed. If symptoms, move to fresh air; get medical advice. Skin Contact: Wash with soap and water. If injected under pressure, get immediate surgical medical attention, regardless of wound appearance. Eye Contact: Flush thoroughly with water. If irritation, get medical assistance. Ingestion: Not normally required. If large quantities swallowed, get medical attention.	Eye/Face: Safety glasses with side shields (chemical goggles if splashes likely). Skin: Hydrocarbon-resistant gloves (e.g., nitrile) and suitable protective clothing. Respiratory: Not usually needed with adequate ventilation. If mists/vapors are generated above limits, a suitable respirator (e.g., dust/organic vapor filter, or SCBA for high concentrations) may be required.
M	MOBILFLUID 424	EXXON MOBIL CORPORATION	Inhalation: Remove to fresh air. If irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing stops, assist ventilation. Skin Contact: Wash contact areas with soap and water. If injected under pressure into or under the skin, or any part of the body, regardless of wound appearance, seek immediate medical evaluation by a physician as a surgical emergency. Eye Contact: Flush thoroughly with water. If irritation occurs, get medical assistance. Ingestion: Normally not required. Seek medical attention if discomfort occurs.	Eye/Face Protection: Chemical goggles (if splashes or contact is possible). Skin Protection: Work gloves that are resistant to hydrocarbons (e.g., nitrile). Normal antistatic work clothes for small spills; full chemical-resistant body suit for large spills. Respiratory Protection: Not usually needed under ordinary conditions with adequate ventilation. If mists are formed, a half-face or full-face respirator with filters for dust/organic vapor may be needed. For high exposure or oxygen deficiency, SCBA is recommended. General Hygiene: Wash thoroughly after handling and before eating, drinking, or smoking. Routinely wash work clothing.
M	Morton Salt	Morton Salt, Inc.	Inhalation: Move to fresh air. If irritation develops, get medical attention. Skin Contact: Wash with soap and water. If irritation persists, get medical attention. Eye Contact: Rinse thoroughly with water for at least 15 minutes, removing contact lenses if easy. If irritation persists, get medical attention. Ingestion: Drink water. If large amounts are swallowed or symptoms occur, get medical attention. DO NOT induce vomiting.	Eye/Face Protection: Safety glasses or goggles are recommended, especially if dust is likely. Skin Protection: Gloves are recommended for prolonged contact. Respiratory Protection: If dust is generated, a NIOSH-approved particulate respirator (dust mask) may be needed. General Hygiene: Wash hands after handling. Avoid generating dust.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
N	New Generation Wheel Bearing Grease for Disc and Drum Brakes SDS	CRC Industries, Inc.	Inhalation: Move to fresh air. If symptoms persist, get medical attention. Skin Contact: Wash with soap and water. If irritation develops or persists, get medical attention. Eye Contact: Flush thoroughly with water for at least 15 minutes. If irritation persists, get medical attention. Ingestion: Rinse mouth. If swallowed, and feeling unwell, get medical attention. Do NOT induce vomiting.	Eye/Face: Safety glasses (goggles if splashes likely). Skin: Protective gloves (e.g., nitrile) and suitable protective clothing. Respiratory: Not normally required with adequate ventilation. If mist/vapor is generated, a particulate/organic vapor respirator may be needed.
N	No 71 Thinner	Wilko Paint	Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Immediately take off all contaminated clothing. Wash with plenty of soap and water. If irritation or rash occurs, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If eye irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING (aspiration hazard). Rinse mouth; never give anything by mouth to an unconscious person.	Eye/Face: Chemical splash goggles and/or face shield. Eyewash station. Skin: Chemical-resistant gloves (e.g., nitrile, neoprene, butyl rubber) and protective clothing. Respiratory: Use in well-ventilated areas with local exhaust. If exposure limits are exceeded or during spraying, use a NIOSH-approved respirator (organic vapor with particulate filter, or supplied-air for high concentrations). Other: Keep away from heat/sparks/open flames. Use explosion-proof equipment and non-sparking tools. Take static discharge precautions. Avoid breathing vapors/spray.
N	No 7 Rectorseal	RectorSeal, LLC	Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult or unwell, call a POISON CENTER or physician. Skin Contact: Immediately take off contaminated clothing. Wash with soap and water. If irritation or rash occurs, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or physician. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.	Eye/Face: Chemical splash goggles. Eyewash station. Skin: Chemical-resistant gloves (e.g., rubber) and protective clothing (e.g., coveralls). Respiratory: Use only with good ventilation. If ventilation is insufficient or exposure limits are exceeded, wear a suitable respirator (e.g., organic vapor). Other: Keep away from heat/sparks/flames. Use explosion-proof equipment and non-sparking tools. Take static discharge precautions. Wash after handling.
N	Norit-Activated Carbon	Norit Americas	Inhalation: Move to fresh air. If cough or breathing problems persist, get medical attention. Skin Contact: Wash with soap and water. If irritation occurs, get medical attention. Eye Contact: Flush with copious amounts of water for at least 15 minutes. If irritation occurs, get medical attention. Ingestion: Drink one or two glasses of water. If gastrointestinal symptoms develop, get medical attention. DO NOT induce vomiting.	Eye/Face Protection: Safety glasses with side shields are recommended. Dust-tight goggles are recommended if dusty conditions are likely. Eyewash equipment should be available. Skin Protection: Appropriate dust-resistant clothing and gloves are recommended to avoid skin contact. Respiratory Protection: Use with adequate local exhaust ventilation to control dust. If dust levels are high, use a NIOSH/MSHA approved particulate respirator (dust filter). Other: For confined spaces, oxygen levels must be monitored before entry due to oxygen depletion risk. Avoid dust generation; take static discharge precautions with powdered forms.
O	Oatey Purple Primer Clear Primer	Oatey	Eye Contact: If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. Skin Contact: If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. Inhalation: If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.	Eye and face protection: Safety glasses with side shields. Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] Hands/feet protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
O	Oatey PVC Heavy Duty Clear Cement	Oatey	Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Skin contact Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Ingestion Call a physician or poison control center immediately. Do not induce vomiting.	Eye/face protection Wear safety glasses with side shields (or goggles). Skin protection - Hand protection Wear appropriate chemical resistant gloves. Other Wear appropriate chemical resistant clothing. Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
P	PARTS Master® 80W90 GEAR OIL	Ashland	Inhalation: Move to fresh air. If symptoms occur, get medical attention. Skin Contact: Wash with soap and water. If irritation persists, get medical attention. If injected under pressure, seek immediate surgical medical attention, regardless of wound appearance. Eye Contact: Flush with plenty of water for at least 15 minutes. If irritation persists, get medical attention. Ingestion: Do NOT induce vomiting. If large quantities are swallowed or symptoms occur, get medical attention.	Eye/Face: Safety glasses with side shields (chemical splash goggles if splashing is likely). Eyewash station. Skin: Protective gloves (e.g., nitrile) and suitable protective clothing to prevent prolonged contact. Respiratory: Not typically required with adequate ventilation. If oil mist or vapors exceed exposure limits, a NIOSH-approved respirator (e.g., particulate filter) may be needed.
P	Phoenix 27-XL Water Dispersible Pipe Joint Lubricant	JTM Products, Inc.	Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical advice/attention. Skin Contact: Wash off immediately with soap and water. If irritation persists, get medical advice/attention. Inhalation: Not a likely route of exposure under normal conditions. If symptoms develop, move to fresh air. Ingestion: Do not taste or swallow. If large quantities are swallowed, call a physician or poison control center immediately.	Eye/Face Protection: Safety glasses or chemical safety goggles. Eyewash station should be available. Skin Protection: Chemically protective gloves to prevent prolonged or repeated skin contact. Respiratory Protection: Not normally required. Ensure adequate ventilation in the work area. General Hygiene: Always observe good personal hygiene, such as washing after handling the material and before eating, drinking, and/or smoking.
P	Prestone® 50/50 Prediluted Engine Coolant/Antifreeze	Prestone Products	Inhalation: Move to fresh air. If breathing stops, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Skin Contact: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, get medical attention. Eye Contact: Immediately flush with large amounts of water for 15 minutes. Get medical attention if irritation persists. Ingestion: SEEK IMMEDIATE MEDICAL ATTENTION. Call a poison control center or emergency department. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.	Eye/Face Protection: Splash-proof goggles. Skin Protection: Chemical-resistant gloves (e.g., neoprene or PVC) and appropriate protective clothing to minimize skin contact. Respiratory Protection: Not normally required with adequate ventilation. If occupational exposure limits are exceeded (e.g., from mists or vapors), use a NIOSH-approved respirator with organic vapor cartridges and dust/mist prefilters or a supplied-air respirator. General Hygiene: Wash exposed skin thoroughly after use. Do not eat, drink, or smoke when using this product.
P	PRO LSPR 6PK 2X WB MARK FLUORCNT GREEN	Rust-Oleum Corporation	Inhalation: Move to fresh air. If not breathing, provide artificial respiration. If breathing is difficult or unwell, call a POISON CENTER or doctor. Skin Contact: Immediately wash with soap and water. Remove contaminated clothing. If irritation or rash occurs, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING (aspiration hazard).	Eye/Face: Safety glasses or goggles. Eyewash station. Skin: Chemical-resistant gloves and protective clothing. Respiratory: Use outdoors or in well-ventilated areas. If inadequate ventilation or exposure limits exceeded, use a NIOSH-approved respirator (organic vapor with particulate pre-filter). Other: Keep away from heat/sparks/flames. Do not pierce/burn container. Use non-sparking tools and explosion-proof equipment. Take static discharge precautions.
P	PROFORCE ANTIBACTERIAL HAND SOAP	Ecolab Inc.	Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical advice/attention. Skin Contact: Rinse with water. If irritation persists, get medical attention. Inhalation: Get medical attention if symptoms occur. Ingestion: Rinse mouth. Get medical attention if symptoms occur.	Eye Protection: No special protective equipment required for normal use, but eye protection should be used when splashing may occur. Skin/Hand Protection: No special protective equipment required for normal use. Respiratory Protection: No personal respiratory protective equipment normally required. General Hygiene: Wash skin thoroughly after handling.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
P	PROFORCE HEAVY DUTY DEGREASER	Ecolab Inc.	Eye Contact: Immediately flush with plenty of water for at least 15 minutes, holding eyelids open. Get immediate medical attention. Skin Contact: Immediately take off contaminated clothing. Wash with plenty of water. If irritation persists or burns occur, get immediate medical attention. Inhalation: Remove to fresh air. If experiencing respiratory irritation or feeling unwell, get medical attention. Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water if conscious. Immediately call a POISON CENTER or physician.	Eye/Face: Chemical splash goggles and/or a face shield are essential. An eyewash station should be readily available. Skin: Chemical-resistant gloves (e.g., nitrile, rubber) and full protective clothing (e.g., apron, coveralls) to prevent skin contact. Respiratory: Use with adequate ventilation. If mists/vapors are generated or exposure limits are exceeded, a NIOSH-approved respirator (e.g., organic vapor with particulate pre-filter) may be required. General: Wash hands thoroughly after handling.
P	PROFORCE LEMON FRESH DISINFECTANT CLEANER	Ecolab Inc.	Eye Contact: Immediately flush with plenty of water for at least 15 minutes, holding eyelids open. Get immediate medical attention. Skin Contact: Immediately take off contaminated clothing. Wash with plenty of water. If irritation or rash occurs, get immediate medical attention. Inhalation: Remove to fresh air. If feeling unwell or having respiratory irritation, get medical attention. Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water if conscious.	Eye/Face: Chemical splash goggles and/or a face shield. Eyewash station. Skin: Chemical-resistant gloves (e.g., rubber, neoprene) and full protective clothing. Respiratory: Use with adequate ventilation. If mists/vapors are generated or exposure limits are exceeded, a NIOSH-approved respirator may be required. General: Wash hands thoroughly after handling.
P	PROMAR® 200 Zero VOC Interior Latex Flat Extra White	THE SHERWIN-WILLIAMS COMPANY	Eye Contact: Immediately flush with plenty of water for at least 10 minutes. Get medical attention. Skin Contact: Flush with plenty of water. Remove contaminated clothing. If irritation persists, get medical attention. Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult or unwell, get medical attention. Ingestion: DO NOT INDUCE VOMITING unless directed by medical personnel. If conscious, give small amounts of water. Get medical attention.	Eye/Face: Safety glasses or goggles. Eyewash station. Skin: Protective gloves and clothing (e.g., long sleeves) to minimize contact. Respiratory: Use with adequate ventilation. If mist/vapor is generated during application (especially spray) or if sanding dried film (generating dust), a NIOSH-approved respirator (e.g., particulate for dust, organic vapor for spray mist) may be needed. General: Wash hands thoroughly after handling.
P	Propylene	Professional Welding Supply	Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or poison control center immediately. Skin Contact: For frostbite, immediately warm affected areas gently with lukewarm water (not hot). Do not rub. Apply a sterile dressing. Get medical attention immediately. Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if easy. Continue rinsing. Get medical attention immediately. Ingestion: Ingestion is not a typical route of exposure for gases.	Eye/Face: Non-vented, impact-resistant goggles. Face shield in combination with goggles if additional protection for the entire face is needed. Skin: Cold-insulating/chemical-resistant gloves (e.g., insulated Nitrile or Neoprene) to prevent frostbite. Wear appropriate protective clothing to prevent skin contact. Respiratory: Use in a well-ventilated area. If the potential exists for exposure to high concentrations, or in oxygen-deficient environments, use a NIOSH-approved supplied-air respirator or self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or other positive-pressure mode.
P	Propylene Glycol	Solvat	Inhalation: Move to fresh air. If symptoms occur, seek medical attention. Skin Contact: Wash with soap and water. If irritation persists, get medical attention. Eye Contact: Rinse immediately with plenty of water for at least 15 minutes, lifting upper and lower eyelids. Remove contact lenses if easy. If irritation persists, get medical attention. Ingestion: Rinse mouth. Do NOT induce vomiting. If large quantities are swallowed or symptoms occur, get medical attention.	Eye/Face Protection: Safety glasses with side shields are recommended. Chemical splash goggles if splashing is likely. An eyewash station should be available. Skin Protection: Chemical-resistant gloves (e.g., nitrile, neoprene) and appropriate protective clothing to prevent prolonged or repeated skin contact. Respiratory Protection: Not normally required under typical use conditions with adequate ventilation. If mists or vapors are generated above exposure limits, a NIOSH-approved respirator with appropriate cartridges may be needed. General Hygiene: Wash hands thoroughly after handling.
P	PROTECT-O-METAL	Quaker Houghton PA, Inc.	Eye Contact: Immediately flush with plenty of water for at least 15 minutes, holding eyelids open. Get immediate medical attention. Skin Contact: Immediately take off all contaminated clothing. Wash with plenty of soap and water. If irritation or rash occurs, get medical attention. Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. Ingestion: DO NOT INDUCE VOMITING. Rinse mouth. Immediately call a POISON CENTER or doctor.	Eye/Face: Chemical splash goggles and/or a face shield. Eyewash station. Skin: Chemical-resistant gloves and suitable protective clothing (e.g., apron, long sleeves). Respiratory: Use with good ventilation. If mist/vapors are generated or exposure limits are exceeded, use a suitable respirator. Other: Practice good hygiene; wash hands after handling. If flammable, eliminate ignition sources.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
P	PURELL® Advanced Hand Sanitizer Sanitizing Gel	GOJO Industries, Inc.	Inhalation: Move to fresh air. If symptoms persist, call a physician. Skin Contact: Wash with water and soap as a precaution. If irritation develops or persists, get medical attention. Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if easy. Continue rinsing. Seek medical advice if irritation persists. Ingestion: DO NOT INDUCE VOMITING. Rinse mouth with water. Obtain medical attention.	Eye/Face: Safety goggles. Face shield for abnormal processing or large spills. Skin: Impervious gloves (e.g., chemical-resistant) for prolonged contact or large handling. Respiratory: Not normally required with adequate ventilation. If concentrations are high or unknown, a NIOSH-approved respirator (e.g., organic vapor) may be needed. Other: Keep away from heat/sparks/open flames. Use non-sparking tools. Take precautions against static discharge. Good general hygiene.
Q	QUINSYN PG	Quincy Compressor	Ingestion: Rinse mouth. Call a POISON CENTER or doctor/ physician if you feel unwell. Get medical attention if symptoms occur. Inhalation: Remove exposed person to fresh air if adverse effects are observed. Skin Contact: Launder contaminated clothing before reuse. Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention. Eye contact: Rinse cautiously with water for several minutes. Flush thoroughly with water. If irritation occurs, get medical assistance. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. 固體工業機械	Eye/face protection: Wear tight-fitting goggles or face shield. Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.
R	Rat Mouse and Snake Glue Traps	Beijing Green Leaf Century Daily-use Chemicals Co. Ltd	Eyes: No anticipated need for first aid. If adhesive gets in eyes, flush with large amounts of water for at least 15 minutes. Do not attempt to remove material. Get immediate medical attention if irritation persists. Skin: No anticipated need for first aid. In case of contact, use vegetable or mineral oil to remove adhesive. Wash affected area with soap and water afterward. If irritation persists, get medical attention. Inhalation: No anticipated need for first aid. If symptoms (unlikely) occur, move to fresh air. Ingestion: No anticipated need for first aid. Small amounts are not anticipated to be harmful. Do not induce vomiting. Get medical attention if symptoms develop or large amounts are swallowed.	Generally: No specific PPE is usually required under normal use conditions as it's considered an article. For handling bulk glue or extensive contact: Eye Protection: Safety glasses or goggles are recommended to prevent accidental splashes, especially if working with bulk glue. Skin Protection: Gloves (e.g., general purpose, disposable) are recommended to avoid direct contact with the adhesive. Respiratory Protection: Not typically required.
R	Red N Tacky Grease	Lucas Oil Products, Inc	Eye Contact: Immediately flush with plenty of water for at least 20 minutes, lifting eyelids. Get immediate medical attention. Chemical burns to eyes need prompt treatment. Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. If irritation or rash occurs, get medical attention. For high-pressure injection, seek immediate surgical medical attention, regardless of wound appearance. Inhalation: Move to fresh air. If feeling unwell, or if fumes are present, rescuer should wear appropriate mask/SCBA. If not breathing, give artificial respiration. Ingestion: Rinse mouth with water. DO NOT INDUCE VOMITING. If conscious, give small quantities of water. If feeling unwell, call a POISON CENTER or physician. Aspiration hazard if swallowed.	Eye/Face: Safety glasses with side shields, or chemical splash goggles. Face shield also recommended. Eyewash station should be available. Skin: Chemical-resistant gloves (e.g., nitrile, neoprene) and appropriate protective clothing (long sleeves, pants, apron) to prevent contact. Respiratory: Not typically required under normal conditions with good ventilation. If mist/vapor is generated above exposure limits, or in confined spaces, a NIOSH-approved respirator (e.g., organic vapor with particulate pre-filter, or SCBA) may be needed.
R	Reducer No. 15	THE SHERWIN-WILLIAMS COMPANY	Inhalation: Remove to fresh air. If not breathing, provide artificial respiration. If breathing is difficult, give oxygen. If feeling unwell, call a POISON CENTER or doctor immediately. Skin Contact: Immediately take off all contaminated clothing. Wash with plenty of soap and water. If irritation or rash occurs, get medical attention. Launder contaminated clothing before reuse. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING (aspiration hazard – may enter lungs). Rinse mouth; never give anything by mouth to an unconscious person.	Eye/Face: Chemical splash goggles and/or a face shield are essential. An eyewash station should be readily available. Skin: Chemical-resistant gloves (e.g., nitrile, neoprene, or butyl rubber, check SDS for specific recommendations) and full protective clothing (e.g., coveralls, apron) to prevent skin contact. Respiratory: Use only outdoors or in a well-ventilated area with local exhaust. If ventilation is insufficient to keep airborne concentrations below exposure limits, or during spraying operations, a NIOSH-approved respirator is required (e.g., organic vapor cartridge with particulate pre-filter, or supplied-air respirator for high concentrations or confined spaces).



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
R	RIDGID Dark Thread Cutting Oil	Ridge Tool Company	Inhalation: Move to fresh air. If feeling unwell, call a Poison Center or doctor. Skin Contact: Remove contaminated clothing. Wash contact areas with soap and water. If irritation occurs, get medical advice/attention. Eye Contact: Flush thoroughly with water for at least 15 minutes. If irritation occurs, get medical assistance. Ingestion: Do NOT induce vomiting. Call a Poison Center or doctor if feeling unwell.	Eye/Face Protection: Safety glasses with side shields (or goggles). Skin Protection: Protective clothing appropriate for the risk of exposure. Wear chemical-resistant gloves (e.g., neoprene, nitrile). Respiratory Protection: In case of inadequate ventilation or if oil mist/vapor concentrations exceed exposure limits, use a suitable respirator. General Hygiene: Always observe good personal hygiene, such as washing after handling the material and before eating, drinking, and/or smoking.
R	RotaMagic™ Super Concentrated Cutting Fluid	Hougen Manufacturing, Inc.	Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if easy. If redness, burning, blurred vision, or irritation persists, seek immediate medical attention. Skin Contact: Flush skin with water and wash with soap. If irritation or rash occurs, get medical attention. Remove contaminated clothing. If injected under the skin (unlikely for this product, but a general cutting fluid caution), seek immediate medical attention. Inhalation: Remove victim to fresh air. If difficulty breathing, tightness in chest, dizziness, vomiting, or unresponsiveness, give oxygen or CPR if needed. Transport to nearest medical facility. Ingestion: DO NOT induce vomiting. Rinse mouth with water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Obtain medical attention.	Eye/Face: Safety glasses with side shields or chemical splash goggles. Skin: Protective gloves (e.g., chemical-resistant, such as nitrile or neoprene) and suitable protective clothing (e.g., long sleeves, apron) to prevent prolonged or repeated contact. Respiratory: Not normally required under normal conditions with adequate ventilation. If mists or sprays are generated, a suitable respirator may be needed. General Hygiene: Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.
R	ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE	Monsanto Company Lawn & Garden	Inhalation Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately. Skin contact Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.	Respiratory protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations. Hand protection Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton) Eye protection Safety glasses with side-shields Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.
S	S-515 Clear Thin Spread Floor Tile Adhesive	AHF Products	First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact: Wash skin with plenty of water. First-aid measures after eye contact: Rinse eyes with water as a precaution. First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.	Hand protection: Protective gloves Eye protection: Safety glasses Skin and body protection: Wear suitable protective clothing Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment
S	S-515 Clear Thin Spread Floor Tile Adhesive	AHF Products	First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact: Wash skin with plenty of water. First-aid measures after eye contact: Rinse eyes with water as a precaution. First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.	Hand protection: Protective gloves Eye protection: Safety glasses Skin and body protection: Wear suitable protective clothing Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment
S	SA9 BATTERY PROTECTOR & SEALER	ITW Permatex, Inc.	Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists. Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.	Eye/face protection Tight sealing safety goggles. Hand protection Wear suitable gloves. Impervious gloves. Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. Respiratory protection Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
S	SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®	S.C. Johnson and Son, Limited	Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. Skin contact: No special requirements Inhalation: No special requirements.	Respiratory protection: No special requirements. Hand protection: No special requirements. Eye protection: No special requirements. Skin and body protection: No special requirements.
S	Seal Krete Primer Sealer	Rust-Oleum Corporation	Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. If irritation persists, get medical attention. Skin Contact: Wash affected area thoroughly with soap and water. Remove contaminated clothing. If irritation develops or persists, seek medical attention. Inhalation: Remove affected person to fresh air. If symptoms (e.g., headache, nausea, difficulty breathing) persist or occur, seek medical attention. If not breathing, provide artificial respiration. Ingestion: DO NOT INDUCE VOMITING. Give 1-2 glasses of water for dilution. Immediately call a Poison Control Center or physician. Never give anything by mouth to an unconscious person.	Eye/Face: Safety glasses (goggles/face shield if splashing). Eyewash available. Skin: Chemical-resistant gloves (nitrile, neoprene, rubber) and protective clothing. Respiratory: Good ventilation. If vapors/mist/dust generated (e.g., spraying, sanding), use NIOSH-approved respirator (organic vapor for vapors, particulate for dust). General: Wash hands after handling.
S	Shell Rotella T4 Triple Protection 15W-40	Shell Oil Products US	Inhalation: No treatment necessary under normal conditions of use. If symptoms (e.g., respiratory irritation) persist, get medical advice. Skin Contact: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. Prolonged or repeated contact without proper cleaning can clog pores, leading to conditions like oil acne/folliculitis. Eye Contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention. Ingestion: In general, no treatment is necessary unless large quantities are swallowed. However, get medical advice. Ingestion may result in nausea, vomiting, and/or diarrhea.	Eye/Face Protection: Safety glasses or chemical goggles, especially if there's a risk of splashing. Skin Protection: Gloves: Impervious gloves (e.g., nitrile, neoprene) to prevent prolonged or repeated skin contact. Protective Clothing: Suitable protective clothing (e.g., long sleeves, pants) to minimize skin exposure. Respiratory Protection: Not normally required under typical use conditions with adequate ventilation. If oil mist or vapors are generated at levels exceeding exposure limits, a suitable respirator (e.g., with particulate filter for mist) may be necessary.
S	Shell Tellus S4 ME 46	Viva Energy Australia Pty Ltd	Inhalation: No treatment is usually necessary under normal conditions. If symptoms like respiratory irritation occur or persist, get medical advice. Skin Contact: Remove contaminated clothing. Flush the exposed area thoroughly with water and then wash with soap if available. If persistent irritation occurs, seek medical attention. HIGH-PRESSURE INJECTION INJURY: If the product is injected under pressure into or under the skin (even if the wound appears minor), get immediate medical attention. Go to a hospital without delay. Do not wait for symptoms to develop. Eye Contact: Flush eye with copious quantities of water. Remove contact lenses if present and easy to do, then continue rinsing. If persistent irritation occurs, get medical attention. Ingestion: In general, no treatment is necessary unless large quantities are swallowed. However, get medical advice. Ingestion may cause nausea, vomiting, and/or diarrhea.	Eye/Face Protection: Safety glasses or chemical goggles, especially if splashing is possible. Skin Protection: Gloves: Impervious chemical-resistant gloves (e.g., nitrile, neoprene) to prevent prolonged or repeated contact. Protective Clothing: Suitable protective clothing (e.g., long sleeves, pants) to minimize skin exposure. Respiratory Protection: Not typically required under normal conditions with good ventilation. If oil mist or vapors are generated above exposure limits, a suitable respirator (e.g., particulate filter for mist) may be necessary.
S	Shell Tellus S2 MX 32	Viva Energy Australia Pty Ltd	Inhalation: No treatment necessary under normal conditions. If symptoms like respiratory irritation persist, get medical advice. Skin Contact: Remove contaminated clothing. Flush exposed area with water and wash with soap. If irritation persists, get medical attention. Eye Contact: Flush eye with copious quantities of water for at least 15 minutes, removing contact lenses if easy to do. If persistent irritation occurs, obtain medical attention. Ingestion: In general, no treatment is necessary unless large quantities are swallowed; however, get medical advice. Ingestion may result in nausea, vomiting, and/or diarrhea.	Eye/Face Protection: Safety glasses or chemical goggles, especially where splashing is possible. Skin Protection: Gloves: Impervious chemical-resistant gloves (e.g., nitrile or neoprene) for routine handling and to prevent prolonged or repeated skin contact. Respiratory Protection: Generally not required under normal conditions with good ventilation. If oil mist or vapors are generated above occupational exposure limits, a suitable respirator (e.g., with a particulate filter for mist or an organic vapor cartridge) may be necessary.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
S	SherLoxane 800 Part A	VALSPAR PAINT (AUSTRALIA) PTY LIMITED	Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Get immediate medical attention. Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs, immediately call a POISON CENTER or physician. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Immediately call a POISON CENTER or physician. Ingestion: DO NOT INDUCE VOMITING.	Eye/Face: Chemical splash goggles, face shield. Eyewash station. Skin: Chemical-resistant gloves (nitrile, neoprene, butyl), chemical-resistant protective clothing (coveralls, apron). Respiratory: Local exhaust ventilation. If limits exceeded or during spraying/sanding, use NIOSH-approved respirator (organic vapor w/ particulate, or supplied-air for high concentrations). Other: No smoking, static precautions, good hygiene.
S	Simple Green® All-Purpose Cleaner Lemon Scent	Sunshine Makers, Inc.	Inhalation: Move to fresh air. If symptoms occur, get medical attention. Skin Contact: Rinse skin with water. If irritation persists, get medical attention. Eye Contact: Rinse cautiously with plenty of water for several minutes. Remove contacts if easy. If irritation persists, get medical attention. Ingestion: Drink plenty of water to dilute. If stomach upset occurs, get medical attention. DO NOT INDUCE VOMITING.	Eye Protection: Safety glasses or goggles are suggested if splashing is likely. Skin Protection: Gloves are recommended for prolonged contact or if skin is sensitive. Respiratory Protection: Not normally needed with adequate ventilation. General: Wash hands after handling.
S	Sodium chloride	Sigma-Aldrich	Inhalation: Move to fresh air. If irritation occurs, get medical attention. Skin Contact: Wash with soap and water. If irritation persists, get medical attention. Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses if easy to do. If irritation persists, get medical attention. Ingestion: Drink water. If large amounts are swallowed or symptoms occur, get medical attention. Do NOT induce vomiting.	Eye/Face Protection: Safety glasses or goggles are recommended, especially if dust generation is likely. Eyewash station should be available. Skin Protection: Gloves (e.g., general purpose, rubber) are recommended for prolonged or frequent contact. Respiratory Protection: Not typically required under normal conditions with adequate ventilation. If dust is generated, a NIOSH-approved particulate respirator (dust mask) may be needed.
S	Soundsafe	Magnaflux	Inhalation: Move to fresh air. If irritation or feeling unwell, get medical attention. Skin Contact: Wash with plenty of water. If irritation persists, get medical attention. Eye Contact: Flush eyes with plenty of water for 15 minutes. Remove contact lenses if easy. If irritation persists, get medical attention. Ingestion: Do NOT induce vomiting unless directed by medical personnel. Get medical attention if feeling unwell.	Eye/Face Protection: Safety glasses or goggles are recommended. Skin Protection: Suitable gloves and protective clothing are recommended. Respiratory Protection: Not generally required with adequate ventilation. If dust/vapors are generated and exceed limits, a suitable respirator may be needed. General Hygiene: Avoid contact with skin/eyes. Wash hands after handling.
S	Spotcheck SKC-S Aerosol	Magnaflux	Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if unwell. Skin Contact: Immediately flush skin with plenty of water. Remove contaminated clothing. If irritation develops or persists, get medical advice/attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor/physician. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.	Eye/Face Protection: Safety glasses or goggles are recommended. Skin Protection: Wear suitable chemical-resistant gloves. Wear suitable protective clothing. Respiratory Protection: Use only outdoors or in a well-ventilated area. If ventilation is insufficient, wear suitable respiratory equipment (e.g., organic vapor respirator). Other: Keep away from heat/sparks/open flames. Do not spray on an open flame. Pressurized container: do not pierce or burn. Use non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharge.
S	SPRAYWAY GLASS CLEANER	PLZ CORP	Inhalation: Move to fresh air. If feeling unwell or having breathing difficulty, call a POISON CENTER or doctor. Skin Contact: Wash with plenty of water. If irritation or rash occurs, get medical advice. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do. Continue rinsing. If eye irritation persists, get medical advice. Ingestion: Immediately call a POISON CENTER or doctor. DO NOT INDUCE VOMITING.	Eye/Face Protection: Safety glasses or goggles are recommended. Skin Protection: Protective gloves and suitable protective clothing are recommended for prolonged contact. Respiratory Protection: Use only in well-ventilated areas. If ventilation is insufficient, wear appropriate respiratory equipment (e.g., organic vapor respirator). Other: Keep away from heat/sparks/open flames. Do not spray on an open flame. Pressurized container: do not pierce or burn.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
S	Startex Paint Thinner	Nexeo Solutions LLC - STARTEX™	Inhalation: Move to fresh air. If feeling unwell, call a POISON CENTER or doctor. If not breathing, provide artificial respiration. Skin Contact: Immediately take off contaminated clothing and rinse skin with water/shower. If irritation occurs, get medical advice. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical advice. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.	Eye/Face: Safety glasses or goggles. Skin: Chemical-resistant gloves and protective clothing. Respiratory: Use outdoors or in a well-ventilated area. If ventilation is insufficient, wear a suitable respirator (e.g., organic vapor). Other: Keep away from heat/sparks/flames. Use explosion-proof equipment and non-sparking tools. Take precautions against static discharge.
S	STP Power Steering Fluid	Energizer Manufacturing, Inc.	Inhalation: Remove to fresh air. If irregular or stopped breathing, seek immediate medical assistance. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Wash with plenty of soap and water. Take off contaminated clothing. If irritation persists, seek medical advice. Eye Contact: Rinse copiously with clean water for at least 10 minutes, holding eyelids apart. Remove contact lenses if easy. If irritation persists, seek medical advice. Ingestion: Rinse mouth with water (if conscious). DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.	Eye/Face Protection: Safety glasses or goggles are recommended. Skin Protection: Wear suitable chemical protection gloves (e.g., neoprene or nitrile). Wear suitable protective clothing. Respiratory Protection: Use only outdoors or in a well-ventilated area. If inadequate ventilation or if exposure limits are exceeded, wear a NIOSH-approved respirator (e.g., organic vapor cartridge with dust/mist prefilter). General Hygiene: Wash hands thoroughly after handling. Do not eat, drink, or smoke in work areas.
S	STRUST +SSPR 6PK METALC ALUMINUM	Rust-Oleum Corporation	Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Wash with plenty of soap and water. Remove contaminated clothing. If irritation or rash occurs, get medical advice/attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical advice/attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING. Aspiration hazard.	Eye/Face: Safety glasses or goggles. Eyewash station available. Skin: Chemical-resistant gloves and protective clothing. Respiratory: Use outdoors or in well-ventilated area. If inadequate ventilation or if exposure limits are exceeded, use a NIOSH-approved respirator (organic vapor with particulate pre-filter). Other: Keep away from heat/sparks/flames. Do not pierce/burn container. Use non-sparking tools and explosion-proof equipment. Take static discharge precautions.
S	STRUST HP 6PK GLOSS BLACK	Rust-Oleum Corporation	Inhalation: Move to fresh air. If not breathing, provide artificial respiration. If breathing is difficult, give oxygen. If feeling unwell, call a POISON CENTER or doctor. Skin Contact: Immediately wash with plenty of soap and water while removing contaminated clothing. If irritation or rash occurs, get medical attention. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if easy. Continue rinsing. If irritation persists, get medical attention. Ingestion: IMMEDIATELY call a POISON CENTER or doctor. DO NOT INDUCE VOMITING (aspiration hazard). Never give anything by mouth to an unconscious person.	Eye/Face: Safety glasses or goggles. Eyewash station available. Skin: Chemical-resistant gloves and protective clothing. Respiratory: Use outdoors or in a well-ventilated area. If inadequate ventilation or exposure limits are exceeded, use a NIOSH-approved respirator (organic vapor with particulate pre-filter).
S	SWAK Anaerobic Pipe Thread Sealant	Swagelok	First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Specific treatment (see first aid measures on this label). If skin irritation or rash occurs: seek medical attention. First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.	Personal protective equipment: Avoid all unnecessary exposure. Hand protection: Wear protective gloves. Respiratory protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
T	THERMALINE 4000	Carboline Global Inc.	AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention. AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician. AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.	EYE PROTECTION: Safety glasses with side-shields. HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.
T	THINNER 2	Carboline Global Inc.	AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention. AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician. AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.	RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required. EYE PROTECTION: Safety glasses with side-shields. HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing
T	Torch Coolant 30% PG Mixture	Hypertherm	After inhalation: Supply fresh air; consult doctor in case of complaints. After skin contact: Rinse with warm water. If skin irritation is experienced, consult a doctor. After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.	Protection of hands: Gloves are advised for repeated or prolonged contact. Wear protective gloves to handle contents of damaged or leaking units. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Eye protection: Safety glasses Body protection: Not required under normal conditions of use.
T	Tresemme Tres Two Extra Hold Hairspray	Alberto-Culver USA	Eyes: Rinse thoroughly with water for 15-20 minutes. Remove contact lenses if applicable. Seek medical attention if irritation persists. Skin: Discontinue use if irritation occurs. Rinse with water and wash with mild soap. Consult a physician if irritation persists. Ingestion: DO NOT induce vomiting. Rinse mouth with water and give water or milk. Inhalation: Move to fresh air. If symptoms persist or worsen, seek medical attention. In case of inhalation from fire decomposition, medical surveillance for 48 hours may be needed.	Protective Eyewear: Safety glasses or chemical splash goggles to prevent eye irritation. Protective Gloves: To prevent skin contact, especially with prolonged exposure. Protective Clothing: To prevent skin contact. Respiratory Protection: An appropriate respirator is recommended when ventilation is inadequate, especially if breathing vapor or mist. General Ventilation: Ensure adequate ventilation in the work area.
U	Unleaded Gasoline	Valero Marketing & Supply Company and Affiliates	Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. Skin contact Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention. Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center.	Eye Protection: Safety goggles or safety glasses with side shields. Hand Protection: Chemical-resistant gloves (e.g., nitrile or neoprene). Respiratory Protection: NIOSH-approved respirator with organic vapor cartridges if ventilation is inadequate or exposure is high. Skin/Body Protection: Protective clothing to prevent skin contact.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
U	Urethane Converter 8800	Carboline Global Inc.	AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention. AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician. AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call.	Respiratory Protection: NIOSH-approved respirator with organic vapor cartridges and particulate filters is essential. Air-supplied respirator is often recommended, especially for spraying or poor ventilation. Eye/Face Protection: Safety goggles or safety glasses with side shields, and ideally a full face shield, to prevent splashes. Hand Protection: Chemical-resistant gloves (e.g., nitrile or neoprene) that are impervious to the product. Skin/Body Protection: Impervious protective clothing (e.g., coveralls, chemical-resistant suit) to prevent skin contact. Ventilation: Excellent local and general exhaust ventilation is critical.
V	Vaseline Petroleum Jelly	UNILEVER	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so.	Eye Protection: Not typically required, but safety glasses are a good idea to prevent splashes, especially in industrial settings. Hand Protection: Not typically required. Gloves (e.g., nitrile) are recommended for prolonged or repeated contact, or if you have sensitive skin. Respiratory Protection: Not usually needed; ensure good ventilation. Skin/Body Protection: Normal work clothing.
W	WD-40 Multi-Use Product Aerosol	WD-40 Company	Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists. Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention. Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist. Signs and Symptoms of Exposure: Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness, and other nervous system effects. Skin contact may cause drying of the skin.	Eye Protection: Safety goggles or safety glasses with side shields to prevent eye contact. Hand Protection: Chemical-resistant gloves (nitrile or neoprene are often recommended) for operations where skin contact is likely. Respiratory Protection: None needed for normal use with adequate ventilation. If exposure limits are exceeded, a NIOSH-approved respirator with organic vapor cartridges is required. Skin/Body Protection: Normal work clothing. Wear impervious clothing if significant contact is likely.
W	WD-40 Multi-Use Product 25% VOC Bulk Liquid	WD-40 Company	Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists. Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention. Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.	Eye Protection: Safety goggles or safety glasses with side shields to prevent eye contact. Hand Protection: Chemical-resistant gloves (nitrile or neoprene are often recommended) for operations where skin contact is likely. Respiratory Protection: None needed for normal use with adequate ventilation. If exposure limits are exceeded, a NIOSH-approved respirator with organic vapor cartridges is required.
W	Weiman Stainless Steel Cleaner & Polish	Weiman Products	Inhalation: May cause respiratory tract irritation. Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. Ingestion: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea, or vomiting. Skin: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.	Eye Protection: Safety glasses are recommended to prevent eye irritation from splashes. Hand Protection: Gloves are advisable for prolonged or repeated skin contact to prevent irritation. Respiratory Protection: Not usually required if used in a well-ventilated area. Skin/Body Protection: Normal work clothing.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
W	Wheel Bearing Lubricant	Lubriplate	Inhalation Remove to fresh air. Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Skin contact Wash skin with soap and water. Ingestion Rinse mouth.	Eye Protection: Safety glasses with side shields are recommended to prevent splashes. Hand Protection: Protective gloves (nitrile or neoprene) are advisable for prolonged or repeated skin contact. Respiratory Protection: Not usually required if used in a well-ventilated area. Skin/Body Protection: Normal work clothing; use impervious clothing if significant contact is expected.
W	WHITE LITHIUM GREASE	Blaster Corporation	Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention. Call a POISON CENTER/doctor if you feel unwell. Skin Contact Not normally required. If skin irritation occurs: Get medical advice/attention. Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion Unlikely to be required but if necessary treat symptomatically. Do not give anything by mouth to an unconscious person. Seek medical treatment.	Eye Protection: Safety glasses with side shields to prevent splashes, especially for aerosol versions. Hand Protection: Protective gloves (nitrile or neoprene) for prolonged or repeated skin contact. Respiratory Protection: Not normally needed for typical use in well-ventilated areas. If using an aerosol in a confined space, or if fumes/mists are generated, use a NIOSH-approved respirator with organic vapor cartridges. Skin/Body Protection: Not typically required beyond regular work clothing, but use impervious clothing if significant contact is likely.
W	WHITE LITHIUM GREASE	CRC Industries, Inc.	Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention. Skin Contact Not normally required. If skin irritation occurs: Get medical advice/attention. Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. Ingestion Unlikely to be required but if necessary treat symptomatically. Do not give anything by mouth to an unconscious person. Seek medical treatment.	Eye Protection: Safety glasses with side shields to prevent splashes, especially for aerosol versions. Hand Protection: Protective gloves (nitrile or neoprene) for prolonged or repeated skin contact. Respiratory Protection: Not normally needed for typical use in well-ventilated areas. If using an aerosol in a confined space, or if fumes/mists are generated, use a NIOSH-approved respirator with organic vapor cartridges. Skin/Body Protection: Not typically required beyond regular work clothing, but use impervious clothing if significant contact is likely.
W	Wilko Paint - Red Primer	Wilko Paint	Inhalation: Move to fresh air. If not breathing, give artificial respiration. Seek medical attention if unwell. Eye Contact: Rinse immediately with plenty of water for at least 15 minutes. Seek immediate medical attention. Skin Contact: Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation occurs. Ingestion: Do not induce vomiting. Rinse mouth. If conscious, give small amounts of water. Seek immediate medical attention.	Eye/Face Protection: Safety glasses with side shields or splash goggles. A full face shield is also highly recommended. Hand Protection: Chemical-resistant gloves (nitrile or neoprene are good choices). Respiratory Protection: A NIOSH-approved respirator with organic vapor cartridges and particulate filters. An air-supplied respirator is often recommended for prolonged use or poor ventilation. Always ensure adequate ventilation. Skin/Body Protection: Protective clothing (e.g., coveralls, chemical-resistant suits) to prevent skin contact.
W	Wilko Paint Activator	Wilko Paint	If inhaled: Remove victim to fresh air. If on skin: Remove contaminated clothing and rinse skin with water. If in eyes: Rinse cautiously with water for several minutes. If swallowed: Do NOT induce vomiting, seek medical attention.	Eye/Face Protection: Safety glasses with side shields or splash goggles. A full face shield is also highly recommended. Hand Protection: Chemical-resistant gloves (nitrile or neoprene are good choices). Respiratory Protection: A NIOSH-approved respirator with organic vapor cartridges and particulate filters. An air-supplied respirator is often recommended for prolonged use or poor ventilation. Always ensure adequate ventilation.
W	WINDEX® ORIGINAL GLASS CLEANER	S.C. Johnson & Son, Inc.	Skin contact : No special requirements Inhalation : No special requirements. Ingestion : No special requirements	Respiratory Protection: No personal respiratory protective equipment normally required for either industrial or household settings. Hand Protection: Not required under normal use for either industrial or household settings. Eye Protection: No special requirements for either industrial or household settings. Skin and Body Protection: No special requirements.



Safety Data Sheet (SDS) List

Revised: 6-16-25

SDS Book Section	Product Name	Manufacturer	First Aid Measures (Section 4)	PPE Needed (Section 8)
W	WORK DAY™ Enamel Spray Paint	Krylon Products Group	Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water.	Eye Protection: Safety spectacles with unperforated sideshields, or eye/face protection. Gloves: Protective gloves. For long or repeated contact, chemical resistant gloves are recommended. Respiratory Protection: Use only outdoors or in a well-ventilated area. If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA. Clothing: Wear protective clothing.
X, Y, Z	Xylene	Airgas USA	Inhalation: Move to fresh air. If not breathing, perform artificial respiration/CPR. Get medical help immediately. Skin Contact: Remove contaminated clothing. Wash affected skin with soap and water for 15-20 minutes. Seek medical attention if irritation persists. Eye Contact: Flush eyes with large amounts of water for at least 15 minutes, holding eyelids open. Get medical attention immediately. Ingestion: Rinse mouth. DO NOT induce vomiting. Give water if conscious. Get medical help immediately.	Eye & Face Protection: Chemical splash goggles; face shield as additional protection. Hand Protection: Chemical-resistant gloves (e.g., Viton/Butyl, Polyvinyl Alcohol, Silver Shield®/4H®, Viton, Barrier®). Body Protection: Chemical-resistant lab coat, long pants, closed-toe shoes; apron and boots for larger quantities. Flame-retardant clothing is recommended. Respiratory Protection: Good ventilation (local exhaust preferred). If exposure limits are exceeded, use a NIOSH-approved respirator with an organic vapor cartridge. Supplied-air respirator for high concentrations or unknown levels.
X, Y, Z	ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT	Zep Inc.	If inhaled: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician. In case of skin contact: Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician. In case of eye contact: Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If swallowed: Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so	Respiratory protection: No personal respiratory protective equipment normally required. Hand protection Material: Protective gloves Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Eye protection: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water. Wear safety glasses with side shields or goggles. Skin and body protection: Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
X, Y, Z	ZINC FILLER TYPE II	Carboline Global Inc.	AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention. AFTER SKIN CONTACT: Wash off with warm water and soap. AFTER EYE CONTACT: Flush eyes with water as a precaution. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. AFTER INGESTION: Do NOT induce vomiting. Obtain medical attention. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.	RESPIRATORY PROTECTION: Dust safety masks are recommended when the dust concentration is more than 10 mg/m3. Respirator must be worn if exposed to dust. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). EYE PROTECTION: Safety glasses with side-shields. HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves.

ALL SEASON T30 SELECT™

MATERIAL SAFETY DATA SHEET

Effective Date: 01/01/2014

4ALL SEASON T30 SELECT is a diester based synthetic lubricant formulated for use in Ingersoll-Rand Type 30 Reciprocating Air compressors.

1. PRODUCT IDENTIFICATION: Mixture-Chemical Family: Diester

2. HAZARDOUS INGREDIENTS: The components of this product are not listed as hazardous or toxic according to OSHA (29 CFR OSHA 1910.1200), NTP, IARC and SARA 313.

Hazardous Materials Identification System (HMIS):

Health	Flammability	Reactivity	Basis	Hazard Ratings Key:
0	1	0	—	4 = Highest 0 = Lowest

3. PHYSICAL DATA:

Boiling Point: N/A

Viscosity: 96.9 cSt @ 40°C

Vapor Density: Greater than air

Solubility in Water: Negligible

Appearance: Light straw colored fluid

Odor: Mild ester odor

Pour Point: -40°F

Specific Gravity: 0.92

Percent Volatile: Negligible

Evaporation Rate: Not volatile, slower than Butyl Acetate

4. FIRE AND EXPLOSION HAZARD DATA:

Flash Point: 480°F (249°C)

Method Used: ASTM D92

Flammable Limits: Not established

Fire Fighting Media: Water spray, dry chemical, foam or carbon dioxide

Fire Fighting Procedures: Use water to keep fire-exposed container cool. Wear self-contained positive pressure breathing apparatus and full protective gear to fight fire. Cool with water spray.

Special Fire and Explosion Hazard: None expected

5. HEALTH HAZARD: This product does not contain any components considered to be health hazards under the OSHA Hazard Communication Standards 29CFR 1910.1200 or under the WHMIS Controlled Product Regulations in Canada.

Effects on exposure: Prolonged or repeated skin contact may tend to remove natural skin oils, thus leading to possible irritation and dermatitis.

Medical Conditions Generally Aggravated by Exposure: May aggravate previous skin condition.

Skin Contact: With repeated contact, a skin defatter. May develop redness or mild irritation.

Skin Absorption: Not established

Ingestion (Acute): Can cause gastrointestinal irritation. No hazard expected in normal use.

Eyes: Mild irritation.

Systemic & Other Effects: Not established



All Season T30 Select™

6. REACTIVITY DATA:

Stability: Stable under normal storage conditions

Incompatibility: Avoid contact with strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

Hazardous Decomposition: Burning will produce toxic fumes.

Hazardous Polymerization: Will not occur under normal conditions

Conditions to Avoid: Open flames

7. HANDLING AND STORAGE:

Exposure Guidelines: Not Established. OSHA TLV/TWA 5mg/m3 oil mist can be used.

Ventilation: Local exhaust to capture vapor, mist or fumes, if necessary.

Respiratory Protection: Use NIOSH-approved equipment: filter, fume or mist respirator under misty conditions.

Skin Protection: For prolonged use, use chemical resistant gloves to minimize skin contact.

Eye Protection: Use safety glasses with side shields.

Special Handling: If splashing occurs, use apron. Do not get in eyes, on skin or clothing. Wash thoroughly after handling.

Storage: Store in a cool, dry place. Keep containers closed when not in use.

8. ENVIRONMENTAL AND DISPOSAL INFORMATION:

Steps to be Taken in Case of Spills: Ventilate area. Prevent spread of spill. Absorb with sand or an inert, absorbing material. Sweep or scoop up and place in a disposal container. Do not contaminate any lakes, ponds, streams, ground water or soil.

Waste Disposal Method: Dispose of in accordance with local, state or federal laws.

9. FIRST AID:

Eyes: Flush with water for at least 15 minutes. Hold eyelids open while flushing. If irritation persists get medical attention.

Skin: Remove contaminated clothing and wash skin thoroughly with soap and water.

Ingestion: Drink 8-10 ounces of water. Do not induce vomiting. Get medical attention immediately.

Inhalation: Remove to fresh air. Get medical attention if discomfort persists.

10. PREPARED BY: Ingersoll-Rand

Note: This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of Ingersoll-Rand's knowledge or obtained from sources believed by Ingersoll-Rand to be accurate, and Ingersoll-Rand does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own tests. Before using any product, READ ITS LABEL.

Emergency Contact:

Telephone: 704/655-4000
Ingersoll Rand Company
800-B Beaty Street
Davidson, NC 28036



SAFETY DATA SHEET



Date of issue/Date of revision 7 June 2021

Version 11

Section 1. Identification

Product name : 866M URETHANE ACCEL/AMERCOAT 866M
Product code : AT866M/16
Other means of identification : Not available.
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications, Used by spraying.
Use of the substance/ mixture : Coating.
Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
SETIQ Interior de la República: 800-00-214-00 (México)
SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 888-977-4762

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 3
ACUTE TOXICITY (inhalation) - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 1.2% (oral), 1.2% (inhalation)

GHS label elements

Section 2. Hazards identification

Hazard pictograms

:

**Signal word**

: Danger

Hazard statements

: Flammable liquid and vapor.
Harmful if swallowed.
Toxic in contact with skin or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of causing genetic defects.
May damage fertility or the unborn child.
Causes damage to organs. (thymus)
Causes damage to organs through prolonged or repeated exposure. (thymus)

Precautionary statements**Prevention**

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

: If exposed: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Emits toxic fumes when heated.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : 866M URETHANE ACCEL/AMERCOAT 866M

Ingredient name	%	CAS number
pentane-2,4-dione	≥90	123-54-6
dibutyltin di(acetate)	≥1.0 - <3.0	1067-33-0

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Toxic if inhaled.
- Skin contact** : Toxic in contact with skin. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

- Special precautions** : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
pentane-2,4-dione	ACGIH TLV (United States, 3/2020). Absorbed through skin. TWA: 25 ppm 8 hours.
dibutyltin di(acetate)	ACGIH TLV (United States, 3/2020). Absorbed through skin. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes. TWA: 0.1 mg/m ³ , (as Sn) 8 hours. OSHA PEL (United States, 5/2018). TWA: 0.1 mg/m ³ , (as Sn) 8 hours. OSHA PEL (United States). TWA: 0.1 mg/m ³ , (as Sn)

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Section 8. Exposure controls/personal protection

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : butyl rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: ☒ Not applicable.
Melting point	: Not available.
Boiling point	: >37.78°C (>100°F)
Flash point	: Closed cup: 33.89°C (93°F)
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Evaporation rate	: Not available.
Vapor pressure	: ☒ 0.39 kPa (2.9 mm Hg)
Vapor density	: Not available.
Relative density	: 0.98
Density (lbs / gal)	: 8.18
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: ☒ Not applicable.
Viscosity	: ☒ Kinematic (40°C (104°F)): >21 mm ² /s (>21 cSt)
Volatility	: 99% (v/v), 98.773% (w/w)
% Solid. (w/w)	: 1.227

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: ☒ Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pentane-2,4-dione	LC50 Inhalation Vapor	Rat	5.1 mg/l	4 hours
	LD50 Dermal	Rat	790 mg/kg	-
	LD50 Oral	Rat	570 mg/kg	-
dibutyltin di(acetate)	LD50 Dermal	Rabbit	2318 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
dibutyltin di(acetate)	Category 1	oral	thymus

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
dibutyltin di(acetate)	Category 1	oral	thymus

Target organs

: Contains material which causes damage to the following organs: mucous membranes, brain, .
Contains material which may cause damage to the following organs: blood, kidneys, the nervous system, liver, bladder, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Toxic if inhaled.
- Skin contact** : Toxic in contact with skin. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

- Conclusion/Summary** : There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

Long term exposure

- Potential immediate effects** : There are no data available on the mixture itself.
- Potential delayed effects** : There are no data available on the mixture itself.

Section 11. Toxicological information

Potential chronic health effects

- General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : Suspected of causing genetic defects.
- Reproductive toxicity** : May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
866M URETHANE ACCEL/AMERCOAT 866M	580	800.5	N/A	5.2	N/A
pentane-2,4-dione	570	790	N/A	5.1	N/A
dibutyltin di(acetate)	N/A	2318	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
dibutyltin di(acetate)	Acute EC10 3.1 mg/l Acute EC50 0.5 mg/l	Fish Algae	72 hours 72 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
dibutyltin di(acetate)	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
pentane-2,4-dione	0.68	-	low

Mobility in soil

- Soil/water partition coefficient (K_{oc})** : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN2310	UN2310	UN2310
UN proper shipping name	PENTANE-2,4-DIONE	PENTANE-2,4-DIONE	PENTANE-2,4-DIONE
Transport hazard class(es)	3 (6.1)	3 (6.1)	3 (6.1)
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : None identified.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

U.S. Federal regulations :

United States - TSCA 12(b) - Chemical export notification:

pentane-2,4-dione

One time notification

United States - TSCA 5(a)2 - Proposed significant new use rules:

pentane-2,4-dione

Listed

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3
 ACUTE TOXICITY (oral) - Category 4
 ACUTE TOXICITY (dermal) - Category 3
 ACUTE TOXICITY (inhalation) - Category 3
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 GERM CELL MUTAGENICITY - Category 2
 TOXIC TO REPRODUCTION - Category 1B
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Composition/information on ingredients

Name	%	Classification
pentane-2,4-dione	≥90	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3
dibutyltin di(acetate)	≥1.0 - <3.0	SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1B GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 3 * Flammability : 3 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 3 Instability : 0

Date of previous issue : 6/14/2020

Organization that prepared the SDS : EHS

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET

WL01050QD

Section 1. Identification

Product name : 1050QD Siliconized Acrylic Latex Caulk

Product code : WL01050QD

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: 1-800-474-3794
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 1.3% (oral), 2.4% (dermal), 2.4% (inhalation)

GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Date of issue/Date of revision : 12/10/2024 **Date of previous issue** : 10/14/2024

WL01050QD 1050QD Siliconized Acrylic Latex Caulk

Version : 27.02 1/14

SHW-85-NA-GHS-US

Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling.
- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Calcium Carbonate	≥50 - ≤75	1317-65-3
Light Aliphatic Hydrocarbon	≤3	64742-47-8
Titanium Dioxide	≤3	13463-67-7
Crystalline Silica, non-respirable	≤1	14808-60-7
Crystalline Silica, respirable powder	<1	14808-60-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Calcium Carbonate	1317-65-3	OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust NIOSH REL (United States, 10/2020). [calcium carbonate] TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction TWA: 10 mg/m ³ 10 hours. Form: Total
Light Aliphatic Hydrocarbon	64742-47-8	ACGIH TLV (United States, 1/2024). [Kerosene] Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.
Titanium Dioxide	13463-67-7	OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2024). TWA: 2.5 mg/m ³ 8 hours. Form: respirable fraction, finescale particles
Crystalline Silica, non-respirable	14808-60-7	OSHA PEL (United States, 5/2018). [Silica, crystalline] TWA: 50 µg/m ³ 8 hours. Form: Respirable dust OSHA PEL Z3 (United States, 6/2016). TWA: 30 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Total dust
Crystalline Silica, respirable powder	14808-60-7	OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable

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: 10/14/2024

Version : 27.02

5/14

WL01050QD

1050QD Siliconized Acrylic Latex Caulk

SHW-85-NA-GHS-US

Section 8. Exposure controls/personal protection

		TWA: 10 mg/m³ / (%SiO₂+2) 8 hours. Form: Respirable OSHA PEL (United States, 5/2018). [Silica, crystalline] TWA: 50 µg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 1/2024). [Silica, crystalline] TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE] TWA: 0.05 mg/m³ 10 hours. Form: respirable dust

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Petroleum refining, hydrotreated light distillate	64742-47-8	CA British Columbia Provincial (Canada, 8/2023). [Kerosene/Jet fuels] Absorbed through skin. Notes: Application restricted to conditions in which there are negligible aerosol exposures. TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. CA Alberta Provincial (Canada, 3/2023). [Kerosene/Jet fuels] Absorbed through skin. OEL: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapour) 8 hours. CA Quebec Provincial (Canada, 2/2024). [kerosene] Absorbed through skin. TWAEV: 200 mg/m³ 8 hours.
Quartz	14808-60-7	CA Quebec Provincial (Canada, 2/2024). [Silica Crystalline -Quartz] TWAEV: 0.1 mg/m³ 8 hours. Form: respirable aerosol fraction
Quartz	14808-60-7	CA British Columbia Provincial (Canada, 8/2023). [Silica, Crystalline - alpha quartz and Cristobalite] TWA: 0.025 mg/m³ 8 hours. Form: Respirable CA Alberta Provincial (Canada, 3/2023). OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate CA Ontario Provincial (Canada, 6/2019). [Silica, Crystalline (Quartz/Tripoli)] TWA: 0.1 mg/m³ 8 hours. Form: Respirable particulate matter. CA Quebec Provincial (Canada, 2/2024). [Silica Crystalline -Quartz] TWAEV: 0.1 mg/m³ 8 hours. Form: respirable aerosol fraction

Section 8. Exposure controls/personal protection

CA Saskatchewan Provincial (Canada, 4/2021).
TWA: 0.05 mg/m³ 8 hours. Form: respirable fraction

Occupational exposure limits (Mexico)

	CAS #	Exposure limits
Light Aliphatic Hydrocarbon	64742-47-8	ACGIH TLV (United States, 1/2024). [Kerosene] Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.

Biological exposure indices (United States)

No exposure indices known.

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

No exposure indices known.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.
Color : Clear.
Odor : Not available.
Odor threshold : Not available.
pH : 9
Melting point/freezing point : Not available.
Boiling point, initial boiling point, and boiling range : 100°C (212°F)
Flash point : Closed cup: Not applicable.
Evaporation rate : 0.13 (butyl acetate = 1)
Flammability : Not available.
Lower and upper explosion limit/flammability limit : Lower: 1%
Upper: 6%
Vapor pressure : 2.3 kPa (17.5 mm Hg)
Relative vapor density : 1 [Air = 1]
Relative density : 1.64
Solubility(ies) :

Media	Result
cold water	Partially soluble

Partition coefficient: n-octanol/water : Not applicable.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)
Molecular weight : Not applicable.
Heat of combustion : 2.194 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Section 10. Stability and reactivity

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 ug l	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
Crystalline Silica, non-respirable	+	1	Known to be a human carcinogen.
Crystalline Silica, respirable powder	+	1	Known to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Calcium Carbonate	Category 3	-	Respiratory tract irritation
Light Aliphatic Hydrocarbon	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Crystalline Silica, respirable powder	Category 1	inhalation	-

Aspiration hazard

Name	Result
Light Aliphatic Hydrocarbon	ASPIRATION HAZARD - Category 1

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : May cause respiratory irritation.
Skin contact : Causes skin irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness
Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
Skin contact : Adverse symptoms may include the following:
irritation
redness
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	274774.85 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Light Aliphatic Hydrocarbon	Acute LC50 2200 µg/l Fresh water	Fish - <i>Lepomis macrochirus</i>	4 days
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - <i>Fundulus heteroclitus</i>	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

International lists

: **Australia inventory (AIIIC)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method

History

Date of printing : 12/10/2024

Date of issue/Date of revision : 12/10/2024

Date of previous issue : 10/14/2024

Version : 27.02

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET



Revision date 03/25/2024

Revision Number 2

1. Identification

Product identifier

Product Name AC-1

Other means of identification

Safety data sheet number 04965

Product Code(s) L0705-057, L0705-060, L0705-062, L0705-072

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Lubriplate Lubricants Company Headquarters
129 Lockwood St.
Newark, NJ 07105
Midwest Office & Plant
1500 Oakdale Ave.
Toledo, OH 43605
419-691-2491
419-693-3806

Emergency telephone number

Emergency Telephone Chem-Tel 1-800-255 3924 (US & Canada only)
01-813-248-0585 (Outside US & Canada)

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Liquid

Physical state Liquid

Odor Mild

Other information

No information available.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health
The product contains no substances which at their given concentration, are considered to be hazardous to health.

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	Colourless to pale yellow
Odor	Mild
Odor threshold	No information available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	> 288 °C / 550.4 °F	>288°C (>550.4°F)
Flash point	> 243 °C / 469.4 °F	None known
Evaporation rate	No data available	< 0.01 (butyl acetate = 1)
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	<0.0013 kPa @ 25°C	None known
Relative vapor density	> 5	None known
Relative density	0.86	None known
Water solubility	No data available Insoluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	46 cSt @ 40°C	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.

Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	15,298.30 mg/kg
ATEmix (dermal)	5,099.40 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-dust/mist)	99,999.00 mg/l
ATEmix (inhalation-vapor)	99,999.00 mg/l

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity

Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.
Other adverse effects	No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

Note: The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
Marine pollutant	No

15. Regulatory information

International Inventories

TSCA	Complies.

DSL/NDL	Complies.
EINECS/ELINCS	Complies.
ENCS	Complies.
IECSC	Complies.
KECI	Complies.
PICCS	Complies.
AIIC	Complies.
NZIoC	Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	X	X	X
Zinc alkyldithiophosphate 68649-42-3	X	-	X
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) 4259-15-8	X	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 0	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 03/25/2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Safety Data Sheet

24 Hour Emergency Phone Numbers
Medical/Poison Control:
 In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

1. Identification

Product Name:	Alex Plus Acrylic Latex Caulk Plus Silicone - Clear	Revision Date:	4/12/2022
Product UPC Number:	070798180710	Supersedes Date:	12/29/2021
Manufacturer:	DAP Global Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non - emergency matters)	Product Use/Class:	Caulking Compound
	SDS Coordinator: MSDS@dap.com	SDS No:	1001901
	Emergency Telephone: Transportation: 1-800-535 -5053 1-352-323-3500 Poison Control: 1-800-222-1222	Preparer:	Regulatory and Environmental Affairs

2. Hazards Identification

EMERGENCY OVERVIEW: Under normal use conditions, this product is not expected to cause adverse health effects. This product contains ethylene glycol.

GHS Classification

Not a hazardous substance or mixture.

Symbol(s) of Product

None

Signal Word

Not a hazardous substance or mixture.

Possible Hazards

9% of the mixture consists of ingredients of unknown acute toxicity

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Lubricating petroleum oil	72623-86-0	7-13	GHS07	H332
Ethylene glycol	107-21-1	1-5	GHS07	H332
Glycol ethers	Proprietary	0.1-1.0	No Information	No Information

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: Material is not likely to present an inhalation hazard at ambient conditions. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: In case of contact, wash skin immediately with soap and water.

FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None Known.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Spray or Fog, Water

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate. Dispose of saturated absorbent or cleaning materials appropriately. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment as necessary. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Scrape up dried material and place into containers.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Ensure fresh air entry during application and drying. Wash thoroughly after handling.

STORAGE: Avoid excessive heat and freezing. Do not store at temperatures above 120 °F (49 °C). Store away from caustics and oxidizers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Lubricating petroleum oil	N.E.	N.E.	N.E.	N.E.
Ethylene glycol	25 ppm TWA vapor fraction	50 ppm STEL vapor fraction, 10 mg/m ³ STEL inhalable particulate matter, aerosol only	N.E.	N.E.
Glycol ethers	N.E.	N.E.	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required.



SKIN PROTECTION: Rubber gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Not required under normal use.



HYGIENIC PRACTICES: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance:	White (changes to clear as it cures)	Physical State:	Paste
Odor:	Very Slight Ammonia	Odor Threshold:	Not Established
Density, g/cm³:	1.01 - 1.02	pH:	Between 7.0 and 12.0
Freeze Point, °C:	Not Established	Viscosity (mPa.s):	Not Established
Solubility in Water:	Not Established	Partition Coeff., n-octanol/water:	Not Established
Decomposition Temperature, °C:	Not Established	Explosive Limits, %:	N.E. - N.E.
Boiling Range, °C:	100 - 100	Auto-Ignition Temperature, °C	Not Established
Minimum Flash Point, °C:	100	Vapor Pressure, mmHg:	Not Established
Evaporation Rate:	Slower Than n-Butyl Acetate	Flash Method:	Seta Closed Cup
Vapor Density:	Heavier Than Air	Flammability, NFPA:	Non-Flammable
Combustible Dust:	Does not support combustion		

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Excessive heat and freezing.

INCOMPATIBILITY: Incompatible with strong bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e., CO_x, NO_x.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Under normal use conditions, this product is not expected to cause adverse health effects. Inhalation of vapors in high concentration may cause mild irritation of respiratory system (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Under normal use conditions, this product is not expected to cause adverse health effects. Prolonged or repeated contact with skin may cause mild irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Under normal use conditions, this product is not expected to cause adverse health effects. Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Under normal use conditions, this product is not expected to cause adverse health effects. Single dose oral toxicity is very low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury. Ingestion of ethylene glycol can cause gastrointestinal irritation, nausea, vomiting, diarrhea and if ingested in sufficient quantities, death.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated or prolonged exposure may cause mild irritation of eyes and skin. Ethylene Glycol may cause kidney and liver damage upon prolonged and repeated overexposures. Studies have shown that repeated inhalation of ethylene glycol has produced adverse cardiovascular changes in laboratory animals. Ethylene glycol has been shown to cause birth defects in laboratory animals.

PRIMARY ROUTE(S) OF ENTRY: Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
72623-86-0	Lubricating petroleum oil	>5000 mg/kg Rat	>2000 mg/kg Rabbit	N.I.
107-21-1	Ethylene glycol	4700 mg/kg Rat	9530 mg/kg Rabbit	N.I.
SEQ548	Glycol ethers	N.I.	N.I.	N.I.

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261. Dispose as hazardous waste according to all local, state, federal and provincial regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Use personal protective equipment as necessary. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Scrape up dried material and place into containers.

14. Transport Information

DOT UN/NA Number:	N.A.
DOT Proper Shipping Name:	Not Regulated
DOT Technical Name:	N.A.
DOT Hazard Class:	N.A.
Hazard SubClass:	N.A.
Packing Group:	N.A.

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylene glycol	107-21-1

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

Revision Date: 4/11/2022 **Supersedes Date:** 12/29/2021

Reason for revision: Substance Hazard Threshold % Changed
Substance and/or Product Properties Changed in Section(s):
01 - Product Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	Flammability:	Reactivity:	Personal Protection:
1	0	0	X

VOC Less Water Less Exempt Solvent, g/L: 41.1

VOC Material, g/L: 22

VOC as Defined by California Consumer Product Regulation, Wt/Wt%: 0.01

VOC Actual, Wt/Wt%: 2.2

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H332 Harmful if inhaled.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS07



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

SAFETY DATA SHEET



The information in this Safety Data Sheet is required pursuant to GHS UN rev. 7

Date of issue/Date of revision 18 August 2023

Version 9

Section 1. Identification

Product code : 00280598
Product name : AMERCOAT 235 RESIN BUFF
Product type : Liquid.

Other means of identification
Not available.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Coating.
Professional applications, Used by spraying.

Uses advised against : Product is not intended, labelled or packaged for consumer use.

Company/undertaking identification : PPG Industries Sales, Inc. and PPG Coatings (Philippines), Inc.
3rd Floor First Life Center
174 Salcedo St., Legaspi Village
Makati City 1229, Philippines
Tel # 00632- 752-6773/ Fax # 00632-752-6771

Emergency telephone number : CHEMTREC +(63) 2-395-3308 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture :  FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (dermal) - Category 5
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 51.9%
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 36.5%

GHS label elements

Hazard pictograms



Signal word : Danger

Section 2. Hazards identification

Hazard statements :  Flammable liquid and vapor.
May be harmful in contact with skin.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
May cause cancer.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention :  Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response :  Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number
 alc , not containing asbestiform fibres	25 - <50	14807-96-6
Epoxy resin (MW ≤ 700)	10 - <20	25068-38-6
Solvent naphtha (petroleum), light aromatic	5 - <10	64742-95-6
1,2,4-trimethylbenzene	3 - <5	95-63-6
2-methylpropan-1-ol	3 - <5	78-83-1
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1 - <3	1675-54-3
xylene	1 - <3	1330-20-7
cumene	0.1 - <0.3	98-82-8
4-nonylphenol, branched	0.1 - <0.3	84852-15-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May cause respiratory irritation.
- Skin contact** : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** :  In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
halogenated compounds
metal oxide/oxides
Cyanate and isocyanate.
hydrogen cyanide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
alc , not containing asbestiform fibres 1,2,4-trimethylbenzene 2-methylpropan-1-ol xylene	TLV (Philippines, 4/2016). TLV: 20 mppf 8 hours. Form: Dust ACGIH TLV (United States, 1/2022). TWA: 10 ppm 8 hours. TLV (Philippines, 4/2016). TLV: 300 mg/m³ 8 hours. TLV: 100 ppm 8 hours. TLV (Philippines, 4/2016). [Xylene]

Section 8. Exposure controls/personal protection

cumene

TLV: 0.1 mg/m³ 8 hours.
TLV (Philippines, 4/2016). Absorbed through skin.
 TLV: 245 mg/m³ 8 hours.
 TLV: 50 ppm 8 hours.

Recommended monitoring procedures :  Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Yellow.
Odor	: Aromatic.
Odor threshold	: Not available.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: >37.78°C (>100°F)

Flammability : Not available.

Lower and upper explosive (flammable) limits : Not available.

Flash point : Closed cup: 35°C (95°F)

Auto-ignition temperature	:	Ingredient name	°C	°F	Method
		 Solvent naphtha (petroleum), light aromatic	280 to 470	536 to 878	

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Kinematic (40°C): >21 mm²/s

Viscosity : 60 - 100 s (ISO 6mm)

Solubility(ies)	: <table border="1"> <tr> <th>Media</th><th>Result</th></tr> <tr> <td> Cold water</td><td>Not soluble</td></tr> </table>	Media	Result	 Cold water	Not soluble
Media	Result				
 Cold water	Not soluble				

Partition coefficient: n-octanol/water : Not applicable.

Vapor pressure	:	Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
			mm Hg	kPa	Method	mm Hg	kPa	Method
		2-methylpropan-1-ol	<12	<1.6	DIN EN 13016-2			

Relative density : 1.4

Relative vapor density : Not available.

Particle characteristics

Median particle size : Not applicable.

Evaporation rate : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Section 10. Stability and reactivity

- Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
- Hazardous decomposition products** : Depending on conditions, decomposition products may include the following materials: Cyanate and isocyanate. carbon oxides nitrogen oxides halogenated compounds hydrogen cyanide metal oxide/oxides
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	>2 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapor	Rat	24.6 mg/l	4 hours
	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
bis-[4-(2,3-epoxipropoxy) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12.3 g/kg	-
	LD50 Oral	Rat	2260 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Epoxy resin (MW ≤ 700)	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-
bis-[4-(2,3-epoxipropoxy) phenyl]propane	Eyes - Mild irritant	Rabbit	-	24 hours	-
	Eyes - Redness of the conjunctivae	Rabbit	0.4	24 hours	-
	Skin - Edema	Rabbit	0.5	4 hours	-
	Skin - Erythema/Eschar	Rabbit	0.8	4 hours	-
	Skin - Mild irritant	Rabbit	-	4 hours	-
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
4-nonylphenol, branched	Skin - Erythema/Eschar	Rabbit	4	-	-

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Section 11. Toxicological information

Respiratory : There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Epoxy resin (MW ≤ 700) bis-[4-(2,3-epoxipropoxy) phenyl]propane	skin skin	Mouse Mouse	Sensitizing Sensitizing

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
alc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	-	Narcotic effects
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
xylene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
cumene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
cumene	Category 2	-	-

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
2-methylpropan-1-ol	ASPIRATION HAZARD - Category 2
xylene	ASPIRATION HAZARD - Category 1
cumene	ASPIRATION HAZARD - Category 1

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : May cause respiratory irritation.
Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness
Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity :  May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product code 00280598	Date of issue 18 August 2023	Version 9
Product name AMERCOAT 235 RESIN BUFF		

Section 11. Toxicological information

Route	ATE value
Oral	10546.83 mg/kg
Dermal	4137.49 mg/kg
Inhalation (vapors)	104.15 mg/l
Inhalation (dusts and mists)	10.24 mg/l

Other information :

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Epoxy resin (MW ≤ 700)	Acute LC50 1.8 mg/l Chronic NOEC 0.3 mg/l	Daphnia Daphnia	48 hours 21 days
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
bis-[4-(2,3-epoxipropoxy) phenyl]propane	Acute LC50 1.8 mg/l Fresh water	Daphnia - <i>daphnia magna</i>	48 hours
4-nonylphenol, branched	Chronic NOEC 0.3 mg/l Acute EC50 0.044 mg/l Acute LC50 0.221 mg/l	Daphnia Crustaceans - <i>Moina macrocopa</i> Fish	21 days 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Epoxy resin (MW ≤ 700)	OECD 301F	5 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Epoxy resin (MW ≤ 700)	-	-	Not readily
bis-[4-(2,3-epoxipropoxy) phenyl]propane	-	-	Not readily
xylene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Epoxy resin (MW ≤ 700)	3	31	Low
1,2,4-trimethylbenzene	3.63	120.23	Low
2-methylpropan-1-ol	1	-	Low
xylene	3.12	7.4 to 18.5	Low
cumene	3.55	35.48	Low
4-nonylphenol, branched	5.4	251.19	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Epoxy resin (MW ≤ 700), Solvent naphtha (petroleum), light aromatic)	Not applicable.

Additional information

UN : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 18 August 2023

Date of previous issue : 3/11/2022

Version : 9

Prepared by : EHS

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 5 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET



Date of issue/Date of revision 14 May 2025

Version 1

Section 1. Identification

Product name : AMERCOAT 450H ACBL BARGE GRAY RESIN

Product code : 00483336

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Professional applications, Used by spraying.

Use of the substance/ mixture : Coating.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
SETIQ Interior de la República: 800-00-214-00 (México)
SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 888-977-4762

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 54.6% (oral), 54.6% (dermal), 43.2% (inhalation)

This product contains TiO₂ which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO₂ is utilized as a raw material in a liquid coating formulation. In this case, the TiO₂ particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO₂ when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

Section 2. Hazards identification

GHS label elements

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: Flammable liquid and vapor.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause cancer.
Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace.

Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Moisture-sensitive material. Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Skin contact to isocyanate monomer may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.

Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Product name : AMERCOAT 450H ACBL BARGE GRAY RESIN

Ingredient name	%	CAS number
n-butyl acetate	≥10 - ≤14	123-86-4
Wollastonite	≥10 - ≤20	13983-17-0
titanium dioxide	≥5.0 - ≤10	13463-67-7
2-methoxy-1-methylethyl acetate	≥1.0 - ≤5.0	108-65-6
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	<1.0	41556-26-7
n-butyl methacrylate	<1.0	97-88-1
carbon black	≤1.0	1333-86-4
4-isocyanatosulphonyltoluene	<1.0	4083-64-1
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	<1.0	82919-37-7
ethylbenzene	<1.0	100-41-4

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Section 4. First aid measures

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
wheezing and breathing difficulties
asthma
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Special provisions** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Special precautions

: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO₂ will be formed, which, in closed containers, could result in pressurization.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
n-butyl acetate	ACGIH TLV (United States, 1/2024) [Butyl acetates] STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.
	OSHA PEL (United States, 5/2018) TWA 8 hours: 150 ppm. TWA 8 hours: 710 mg/m³.
Wollastonite	ACGIH TLV (United States, 1/2024)

Section 8. Exposure controls/personal protection

titanium dioxide

2-methoxy-1-methylethyl acetate
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
n-butyl methacrylate
carbon black

4-isocyanatosulphonyltoluene
crystalline silica, respirable powder (<10 microns)

methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
ethylbenzene

TWA 8 hours: 1 mg/m³. Form: Inhalable fraction.**ACGIH TLV (United States, 1/2024)**TWA 8 hours: 2.5 mg/m³. Form: respirable fraction, finescale particles.**OSHA PEL (United States, 5/2018)**TWA 8 hours: 15 mg/m³. Form: Total dust.

None.

None.

None.

ACGIH TLV (United States, 1/2024)TWA 8 hours: 3 mg/m³. Form: Inhalable fraction.**OSHA PEL (United States, 5/2018)**TWA 8 hours: 3.5 mg/m³.

None.

ACGIH TLV (United States, 1/2024) [Silica, crystalline]TWA 8 hours: 0.025 mg/m³. Form: Respirable fraction.**OSHA PEL Z3 (United States, 6/2016)**TWA 8 hours: 250 / (%SiO₂+5) mppcf. Form: Respirable.TWA 8 hours: 10 / (%SiO₂+2) mg/m³. Form: Respirable.

None.

ACGIH TLV (United States, 1/2024)

Ototoxicant.

TWA 8 hours: 20 ppm.

OSHA PEL (United States, 5/2018)

TWA 8 hours: 100 ppm.

TWA 8 hours: 435 mg/m³.

Key to abbreviations

A = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Ceiling Limit
F = Fume
IPEL = Internal Permissible Exposure Limit
OSHA = Occupational Safety and Health Administration.
R = Respirable
Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

S = Potential skin absorption
SR = Respiratory sensitization
SS = Skin sensitization
STEL = Short term Exposure limit values
TD = Total dust
TLV = Threshold Limit Value
TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use an air-fed respirator unless a site-specific assessment determines that an air-fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

The respiratory protection shall be in accordance to 29 CFR 1910.134.

Restrictions on use : Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.
Color : Gray.
Odor : Characteristic.
Odor threshold : Not available.
pH : Not applicable.
Melting point : Not available.

Section 9. Physical and chemical properties

Boiling point	: >37.78°C (>100°F)				
Flash point	: Closed cup: 38°C (100.4°F)				
Auto-ignition temperature	: Not available.				
Decomposition temperature	: Not available.				
Flammability	: Not available.				
Lower and upper explosive (flammable) limits	: Not available.				
Evaporation rate	: Not available.				
Vapor pressure	: Not available.				
Vapor density	: Not available.				
Relative density	: 1.3				
Density (lbs / gal)	: 10.85				
Solubility(ies)	<table><tr><th>Media</th><th>Result</th></tr><tr><td>cold water</td><td>Not soluble</td></tr></table>	Media	Result	cold water	Not soluble
Media	Result				
cold water	Not soluble				
Partition coefficient: n-octanol/water	: Not applicable.				
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >21 mm ² /s (>21 cSt)				
% Solid. (w/w)	: 79.369				

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: In a fire, hazardous decomposition products may be produced. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	30 mg/l	4 hours
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	6190 mg/kg	-
	LD50 Oral	Rat	3.125 g/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LC50 Inhalation Gas.	Rat	4910 ppm	4 hours
	LC50 Inhalation Vapor	Rat	29000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	10.2 g/kg	-
	LD50 Oral	Rat	16 g/kg	-
n-butyl methacrylate	LD50 Oral	Rat	>10 g/kg	-
	LD50 Oral	Rat	2234 mg/kg	-
	LD50 Oral	Rat	3.125 g/kg	-
	LD50 Oral	Rat	3.125 g/kg	-
carbon black	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
4-isocyanatosulphonyltoluene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Wollastonite	-	3	-
titanium dioxide	-	2B	-
n-butyl methacrylate	-	2B	-
carbon black	-	2B	-
crystalline silica, respirable powder (<10 microns)	+	1	Known to be a human carcinogen.
ethylbenzene	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3	-	Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
n-butyl methacrylate	Category 3	-	Respiratory tract irritation
4-isocyanatosulphonyltoluene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-butyl methacrylate	Category 2	-	-
crystalline silica, respirable powder (<10 microns)	Category 1	inhalation	-
ethylbenzene	Category 2	-	hearing organs

Target organs : Contains material which causes damage to the following organs: brain, central nervous system (CNS).
Contains material which may cause damage to the following organs: kidneys, lungs, upper respiratory tract, skin, eye, lens or cornea.

Aspiration hazard

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Section 11. Toxicological information

Skin contact : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:
wheezing and breathing difficulties
asthma
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary : There are no data available on the mixture itself. Skin contact to isocyanate monomer may lead to allergic lung reaction. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Repeated exposure may lead to permanent respiratory disability. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. This product contains TiO₂ which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many products, TiO₂ is utilized as a raw material in a liquid coating formulation. In this case, the TiO₂ particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO₂ when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic

Section 11. Toxicological information

effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
n-butyl acetate	10768	N/A	N/A	N/A	N/A
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	3125	N/A	N/A	N/A	N/A
n-butyl methacrylate	16000	10200	4910	29	N/A
4-isocyanatosulphonyltoluene	2234	N/A	N/A	N/A	N/A
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	3125	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	-

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-
2-methoxy-1-methylethyl acetate	-	83 % - Readily - 28 days	-	-
ethylbenzene	-	79 % - Readily - 10 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
n-butyl acetate	2.3	-	Low
2-methoxy-1-methylethyl acetate	1.2	-	Low
n-butyl methacrylate	2.99	-	Low
ethylbenzene	3.6	79.43	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

Product code 00483336	Date of issue 14 May 2025	Version 1
Product name AMERCOAT 450H ACBL BARGE GRAY RESIN		

14. Transport information

	DOT	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class (es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	25839.9	Not applicable.	Not applicable.
RQ substances	(xylene, n-butyl acetate)	Not applicable.	Not applicable.

Additional information

- DOT** : This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.
- IMDG** : None identified.
- IATA** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3
 RESPIRATORY SENSITIZATION - Category 1
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION - Category 2
 HNOC - Defatting irritant

Section 15. Regulatory information

Composition/information on ingredients

Name	%	Classification
n-butyl acetate	≥10 - ≤14	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
titanium dioxide	≥5.0 - ≤10	CARCINOGENICITY - Category 2
2-methoxy-1-methylethyl acetate	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	<1.0	SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION - Category 2
n-butyl methacrylate	<1.0	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HNOC - Defatting irritant
carbon black	≤1.0	COMBUSTIBLE DUSTS CARCINOGENICITY - Category 2
4-isocyanatosulphonyltoluene	<1.0	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
crystalline silica, respirable powder (<10 microns)	<1.0	CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	<1.0	SKIN SENSITIZATION - Category 1B TOXIC TO REPRODUCTION - Category 2
ethylbenzene	<1.0	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant

SARA 313

<u>Supplier notification</u>	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
	: ethylbenzene	100-41-4	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Section 15. Regulatory information

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

 **WARNING:** Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

Please refer to Section 2 of this document for GHS hazard classifications.

The customer is responsible for determining the PPE code for this material.

Date of previous issue : No previous validation

Organization that prepared the SDS : EHS

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

 Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET



Conforms to Official Mexican Standard NOM-018-STPS-2015

Date of revision 11 February 2025
Version 2

Date of issue 11 February 2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name : AMERCOAT 880 GLASSFLAKE ADDITIVE
Product code : 00334867
Other means of identification : Not applicable.
Product type : Solid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications, Used by spraying.
Use of the substance/mixture : Coating.
Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
SETIQ Interior de la República: 800-00-214-00 (México)
SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 888-977-4762

SECTION 2: Hazards identification

Classification of the substance or mixture : Not classified.

☒ Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity:
99.9% (oral), 99.9% (dermal), 99.9% (inhalation)

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.
Precautionary statements
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

SECTION 2: Hazards identification

Other hazards which do not result in classification : Emits toxic fumes when heated.

See toxicological information (Section 11)

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture
Product name : AMERCOAT 880 GLASSFLAKE ADDITIVE
Other means of identification : Not applicable.

Ingredient name	%	CAS number
Glass, oxide, chemicals	≥90	65997-17-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

See toxicological information (Section 11)

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Special precautions : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

SECTION 7: Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
glass, oxide, chemicals	NOM-010-STPS-2014 (Mexico, 4/2016) [Fibras vítreas sintéticas, fibra de lana mineral] TWA 8 hours: 1 fibers/cm³. NOM-010-STPS-2014 (Mexico, 4/2016) [Fibras vítreas sintéticas, filamento de fibra de vidrio continuo] TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. TWA 8 hours: 1 fibers/cm³. Form: Inhalable fraction.

Key to abbreviations

C = Ceiling Limit
 IPEL = Internal Permissible Exposure Limit

STEL = Short term exposure limit
 TLV = Threshold Limit Value
 TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 8: Exposure controls/personal protection

Eye/face protection	: Safety glasses with side shields.
<u>Skin protection</u>	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

SECTION 9: Physical and chemical properties

Appearance

Physical state	: Solid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
Molecular weight	: Not applicable.
pH	: ☒ Not applicable.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: Not applicable.
Auto-ignition temperature	: ☒ Not applicable.
Decomposition temperature	: Not available.
Flammability	: Not available.
Lower and upper explosive (flammable) limits	: ☒ Not applicable.
Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: ☒ Not applicable.
Relative density	: 2.5
Density (lbs / gal)	: 20.86

Solubility(ies)

Media	Result
☒ cold water	Not soluble

Solubility in water	: 0 g/l
Partition coefficient: n-octanol/water	: ☒ Not applicable.
Viscosity	: ☒ Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not applicable.
% Solid. (w/w)	: 100

SECTION 10: Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
Refer to protective measures listed in sections 7 and 8.
- Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
- Hazardous decomposition products** : ☒ Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
 Glass, oxide, chemicals	-	3	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary : There are no data available on the mixture itself. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.
Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.
Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity :  No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

SECTION 12: Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

SECTION 14: Transport information

	Mexico Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

SECTION 14: Transport information

Additional information

Mexico : None identified.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

SECTION 15: Regulatory information

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

SECTION 16: Other information

Please refer to Section 2 of this document for GHS hazard classifications.
The customer is responsible for determining the PPE code for this material.

Date of previous issue : 12/20/2018

Organization that prepared the SDS : EHS

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

SECTION 16: Other information

The information, which is based on the current knowledge of the chemical substance or mixture and applies to appropriate safety precautions for the product, is deemed correct but is not exhaustive and will be used only as a guide.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET



Date of issue/Date of revision 5 May 2023

Version 11

Section 1. Identification

Product code : AK400-B
Product name : AMERLOCK 400 CURE
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Coating.
Industrial applications.

Supplier's details : PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803.
Tel +65 68653737

Emergency telephone number (with hours of operation) : CHEMTREC +(65)-31581349 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (inhalation) - Category 3
SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1

GHS label elements, including precautionary statements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

Hazard statements : Flammable liquid and vapor.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Toxic if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor.

Response : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : Store in a well-ventilated place. Keep container tightly closed.

Disposal : Not applicable.

Other hazards which do not result in classification : Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

EC number : Mixture.

Ingredient name	%	CAS number
Alc , not containing asbestiform fibres	20 - <25	14807-96-6
xylene	10 - <20	1330-20-7
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	10 - <20	68082-29-1
4-nonylphenol, branched	5 - <10	84852-15-3
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-ethylbenzene	5 - <10	9046-10-0 (n = 2-6)
furfuryl alcohol	1 - <3	100-41-4
Phenol, 2-nonyl-, branched	1 - <3	98-00-0
3,6-diazaoctanethylenediamin	0.3 - <1	91672-41-2
	0.3 - <1	112-24-3

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: Toxic if inhaled. May cause respiratory irritation.
Skin contact	: Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness dryness cracking blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Section 4. First aid measures

- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
sulfur oxides
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
falc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006).
xylene	PEL (long term): 2 mg/m ³ 8 hours. Workplace Safety and Health Act (Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m ³ 15 minutes. PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
furfuryl alcohol	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 60 mg/m ³ 15 minutes. PEL (short term): 15 ppm 15 minutes. PEL (long term): 40 mg/m ³ 8 hours. PEL (long term): 10 ppm 8 hours.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Section 8. Exposure controls/personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Chemical splash goggles and face shield.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : butyl rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.				
Color	: Yellow.				
Odor	: Characteristic.				
pH	: insoluble in water.				
Boiling point	: >37.78°C (>100°F)				
Flash point	: Closed cup: 29.44°C (85°F)				
Evaporation rate	: 0.66 (butyl acetate = 1)				
Flammability (solid, gas)	: liquid				
Vapor pressure	: 1.2 kPa (8.8 mm Hg) (at 20°C)				
Vapor density	: Highest known value: 15.4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich). Weighted average: 6.29 (Air = 1)				
Relative density	: 1.39				
Solubility(ies)	<table><tr><th>Media</th><th>Result</th></tr><tr><td>cold water</td><td>Not soluble</td></tr></table>	Media	Result	cold water	Not soluble
Media	Result				
cold water	Not soluble				
Auto-ignition temperature	: Lowest known value: 372°C (701.6°F) (4-nonylphenol, branched).				
Viscosity	: Kinematic (40°C (104°F)): >21 mm ² /s (>21 cSt)				

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	LD50 Oral	Rat	>2000 mg/kg	-
4-nonylphenol, branched	LD50 Dermal	Rabbit	2.14 g/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-	LD50 Dermal	Rat	2980 mg/kg	-
ethylbenzene	LD50 Oral	Rat	2885 mg/kg	-
	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
furfuryl alcohol	LC50 Inhalation Vapor	Rat	934 mg/m ³	4 hours
	LC50 Inhalation Vapor	Rat	233 ppm	4 hours
	LD50 Dermal	Rabbit	400 mg/kg	-
	LD50 Dermal	Rat	3825 mg/kg	-
	LD50 Oral	Rat	0.132 g/kg	-
3,6-diazaoctanethylenediamin	LD50 Dermal	Rabbit	1465 mg/kg	-
	LD50 Oral	Rat	1716 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Eyes - Severe irritant	Rabbit	-	-	-
4-nonylphenol, branched	Skin - Irritant	Human	-	-	-
	Skin - Erythema/Eschar	Rabbit	4	-	-

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Section 11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	skin	Mouse	Sensitizing
3,6-diazaoctanethylenediamin	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation
furfuryl alcohol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
furfuryl alcohol	Category 2	-	-

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Section 11. Toxicological information

- Inhalation** : Toxic if inhaled. May cause respiratory irritation.
- Skin contact** : Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.

Section 11. Toxicological information

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	11306.81 mg/kg
Dermal	7392.54 mg/kg
Inhalation (vapors)	8.54 mg/l
Inhalation (dusts and mists)	1.7 mg/l

Other information

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	EC10 1.78 mg/l	Algae	72 hours
4-nonylphenol, branched	Acute EC50 0.044 mg/l Acute LC50 0.221 mg/l EC50 15 mg/l	Crustaceans - Moina macrocopa Fish Algae	48 hours 96 hours 72 hours
Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethyl)-ω-(2-aminomethylethoxy)-ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia	48 hours -
Phenol, 2-nonyl-, branched	Acute LC50 0.017 mg/l	Fish - Pleuronectes americanus	96 hours

Conclusion/Summary : There are no data available on the mixture itself.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethylbenzene	-	79 % - Readily - 10 days	-	-

Conclusion/Summary : There are no data available on the mixture itself.

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	-	-	Not readily
Poly[oxy(methyl-1,2-ethanediyl)], α -(2-aminomethylethyl)- ω -(2-aminomethylethoxy)-ethylbenzene	-	-	Not readily
	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	7.4 to 18.5	low
4-nonylphenol, branched	5.4	251.19	low
ethylbenzene	3.6	79.43	low
furfuryl alcohol	0.3	-	low
3,6-diazaoctanethylenediamin	-1.66 to -1.4	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8)	3 (8)	3 (8)
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(Polyamide, 4-nonylphenol, branched)	Not applicable.

Additional information

UN : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 5 May 2023

Date of previous issue : 9/17/2022

Version : 11

Prepared by : EHS

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.



SAFETY DATA SHEET

US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 10-Oct-2022

Revision Date 10-Oct-2022

Revision Number 1

1. Identification

Product identifier

Product Name AMSOIL Signature Series SAE 5W-20, 5W-30, 5W-50 100% Synthetic Motor Oil

Other means of identification

Product Code(s) AMR, ASL, ALM

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Engine oil

Restrictions on use Avoid formation of mists

Details of the supplier of the safety data sheet

Initial supplier identifier

AMSOIL INC.
Bay Adelaide Centre, East
Tower
22 Adelaide St. W
Toronto, ON, Canada M5H 4E3
T: +1 877-822-5172

Manufacturer Address

AMSOIL INC.
One AMSOIL Center
Superior, WI 54880, USA
T: +1 715-392-7101

E-mail compliance@amsoil.com

Emergency telephone number

Emergency telephone CHEMTREC: Within USA and Canada: 1-800-424-9300
Outside the USA and Canada: +1 703-741-5970
(collect calls accepted) 24/7

2. Hazard(s) identification

Classification

Reproductive toxicity	Category 2

Label elements

Warning

Hazard statements

Suspected of damaging fertility or the unborn child.



Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant.

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Reaction products of 1-decene, hydrogenated	68649-12-7	5-10	-	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	1-5	-	-
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	0.1-1	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Chemical Additions

The classification as a carcinogen does not apply as it can be shown that the substance(s) contain(s) less than 3% DMSO extract as measured by IP 346.

4. First-aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Get medical attention if irritation or other symptoms occur.

Inhalation

Remove person to fresh air and keep comfortable for breathing.

Eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms	Prolonged contact may cause redness and irritation. May cause temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating gases and vapors. Containers can burst or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. See section 8 for more information. Use personal protective equipment as required.
For emergency responders	Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains.
Reference to other sections	For additional information see: Section 8: Exposure controls/personal protection; Section

12: Ecological information; Section 13: Disposal considerations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid contact with used product. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from physical damage. Do not reuse empty containers. Store in accordance with local regulations. Store away from incompatible materials. See section 10 for more information.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³. Short-term exposure limit (15-minute): 10 mg/m³.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

If there is a risk of contact: Wear safety glasses with side shields (or goggles).

Hand protection

If there is a risk of contact: Wear suitable gloves.

Skin and body protection

If there is a risk of contact: Wear suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls

Avoid release to the environment.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state

Liquid

Color

Amber

Odor

Mild hydrocarbon

Odor threshold

No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point	220 - 224 °C / 428 - 435.2 °F	Cleveland Open Cup ASTM D 92
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density	0.8571-0.8590	No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity	50.6 -119.5cSt at 40 °C 8.8-19.4 cSt at 100 °C	ASTM D445
Dynamic viscosity		No data available
<u>Other information</u>		
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Softening point	No information available	
Pour Point	-50 - (-48)°C [ASTM D 97]	
Fire Point	224°C (COC) [ASTM D 92]	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation. May cause gastrointestinal discomfort if consumed in large amounts. May cause temporary eye irritation. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 34,125.00 mg/kg
ATEmix (dermal) 7,570.00 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Reaction products of 1-decene, hydrogenated	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Component Information	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Method	OECD Test No. 404: Acute Dermal Irritation/Corrosion
Species	Rabbit
Exposure route	Dermal
Effective dose	0.5 mL
Exposure time	4 hours
Results	Mild skin irritant

Serious eye damage/eye irritation No information available.

Component Information	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Method	OECD Test No. 405: Acute Eye Irritation/Corrosion
Species	Rabbit
Exposure route	Eye
Effective dose	0.1 mL
Results	non-irritant

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The supplier declares that it can be shown that the substance(s) contain less than 3% DMSO extract as measured by IP 346.

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard Due to the viscosity, this product does not present an aspiration hazard.

12. Ecological information

Ecotoxicity Not considered to be harmful to aquatic life. Large or frequent spills may have hazardous effects on the environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1	EC50: 51mg/L (48h, Daphnia magna)	LC50: >100mg/L (96h, Danio rerio)	-	-
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	-	LC50: 1.0 - 5.0mg/L (96h, Pimephales promelas) LC50: 10.0 - 35.0mg/L (96h, Pimephales promelas)	-	EC50: 1 - 1.5mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Reaction products of 1-decene, hydrogenated 68649-12-7	5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1	6.66

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation, Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

California waste information This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts - 68649-42-3	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	X	-	X
Diphenylamine 122-39-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Issuing Date 10-Oct-2022

Revision Date 10-Oct-2022

Revision Note Initial Release.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

Section 1: Product and Company Identification

Product Name: **Radnor Solvent Based Anti-Spatter (Aerosol)**
Product Identifier: Anti-Spatter
Product Use: Prevents Spatter Build Up in Welding Operations
Item Code(s): 64000100, 64000102
SDS Code: 001R
Supplier: Radnor
Physical Address: 259 North Radnor - Chester Road - Suite 100
Radnor, PA, 19087-5283
Emergency Phone: 866-734-3438
Date of Preparation: August 24, 2007 (Revised September 26, 2018)
OSHA Regulatory Status: Regulated
WHMIS Classification: D1B, D2A, D2B, A

Section 2: Hazards Identification

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

CLP/GHS Classification (1272/2008):

Physical	Health	Environmental
None	Eye Irritation Category 2A Skin Irritation Category 2 Specific Target Organ Toxicity - Single Exposure Category 3 (H335, H336) Carcinogen Category 2	None

EU CLASSIFICATION (67/548/EEC): Xn R40 (Carcinogen Category 2)

Label Elements

WARNING! Contains methylene chloride



Hazard Phrases

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

Precautionary Phrases

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	IF EYE IRRITATION PERSISTS: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	IF SKIN IRRITATION OCCURS: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P308 + P313	IF EXPOSED OR CONCERNED: Get medical advice/attention.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local or national regulations.

OTHER IMPORTANT HAZARDS: N/A

SUGGESTED HMIS RATING: Health | 2 | Flammability | 1 | Reactivity | 1 | Personal Protection | C |

SUGGESTED NATIONAL FIRE PROTECTION ASSOCIATION: Health | 2 | Flammability | 1 | Reactivity | 1 |

Section 3: Composition and Information on Ingredients

SUBSTANCES:

Chemical Name	CAS#	EINECS#	EU Classification (67/548/EEC)	GHS Classification Regulation (EC) No 1272/2008	%
Methylene Chloride (Dichloromethane)	75-09-2	200-838-9	Xn (Carc Cat 2) R40	Eye Irritation Category 2A (H319), Skin Irritation Category 2 (H315), Specific Target Organ Toxicity Single Exposure Category 3 (H335, H336), Carcinogen Category 2 (H351)	>90
Carbon Dioxide	124-38-9				

See Section 16 for further information on EU and GHS Classification.

Section 4: First Aid Measures

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.

INGESTION: Unlikely due to being in aerosol form. Should actual ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

EYE CONTACT: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment.

SKIN CONTACT: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.

Section 5: Fire Fighting Measures

MEANS OF EXTINCTION: For warehouse and storage conditions, use NFPA Class B extinguishers (CO₂, dry chemical or universal aqueous film forming foam).

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure demand. Use water spray to cool fire exposed aerosol containers for containers can rupture violently from heat developed pressure.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure. In addition, when liquid or vapor comes into contact with flames or red hot metal, products of combustion will be created. Firemen should wear self-contained breathing apparatus.

FLASH POINT / DETERMINATION: None to boiling

UPPER FLAMMABLE LIMIT: N/Av

LOWER FLAMMABLE LIMIT: N/Av

AUTO-IGNITION TEMPERATURE: N/Av

HAZARDOUS COMBUSTION PRODUCTS: N/Av

EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: N/Av

EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE: N/Av

Section 6: Accidental Release Measures

LEAK / SPILL RESPONSE: Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content should be contained as any other solvent spill. Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove all sources of ignition and use non-sparking equipment. Soak up material with inert absorbent. Flush area with water. All rinsate should be placed in safety containers and labeled for proper disposal.

SPECIAL INSTRUCTIONS: Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal considerations.

Section 7: Handling and Storage

HANDLING PROCEDURES / EQUIPMENT: Avoid prolonged or repeated skin contact. Avoid breathing vapors.

STORAGE REQUIREMENTS: Store in area below 120°F (49°C). Do not incinerate (burn) containers. Assure can is in a secure place to prevent knocking over and accidental rupture. Always replace overcap when not in use. For store of pallet quantities, compliance with ANSI/NFPA 30B is recommended.

Section 8: Exposure Controls / Personal Protection

EYE PROTECTION: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact could occur, chemical splash proof goggles are recommended.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex® gloves or other clothing impervious to the ingredient listed in Section 2.

ENGINEERING CONTROLS: General ventilation (typically 10 air changes for hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system, may be needed to control air contamination below that of the lowest TLV/PEL rated ingredient from Section 2.

EXPOSURE GUIDELINE LEVELS: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.

Control Parameters

Chemical Name	Exposure Limits
Methylene Chloride (Dichloromethane)	25ppm TWA OSHA PEL, 125 ppm STEL 50 ppm TWA ACGIH TLV 100 ppm TWA UK OEL, 300 ppm STEL 75 ppm TWA Germany AGS, 300 ppm STEL
Soya Lecithin	None Established
Carbon Dioxide	5000 ppm TWA OSHA PEL 5000 ppm TWA ACGIH TLV, 30,000 ppm STEL

In the United States, 29 CFR 1910.1052 is the OSHA regulation on Occupational Exposure to Methylene Chloride. Assure compliance with these regulations.

Section 9: Physical and Chemical Properties

PHYSICAL STATE:	Liquid / Gas
ODOR and APPEARANCE:	Clear to white liquid with a chloroform-like odor
ODOR THRESHOLD:	N/Av
SPECIFIC GRAVITY (H ₂ O=1):	1.32
VAPOR PRESSURE (mm HG):	390
VAPOR DENSITY (AIR=1):	2.9
EVAPORATION RATE (BA=1):	14.50
BOILING POINT (°F):	104°F
FREEZE POINT (°F):	N/Av
pH:	N/Av
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N/Av
DENSITY:	N/Av
SOLUBILITY IN WATER (% by weight):	1.3
% VOLATILE BY VOLUME:	20.0% Wt. Max
VOC'S:	N/Av

Section 10: Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: Heat, sparks, open flame, red hot metal, electrical arcs, high pressure in aluminum systems.

MATERIALS TO AVOID (INCOMPATIBILITIES): Strong oxidizing materials (i.e. oxygen, nitrogen, peroxide, oxidizers) and reactive metals (i.e. aluminum, potassium, sodium, etc).

CONDITIONS OF REACTIVITY: N/Av

HAZARDOUS DECOMPOSITION BY-PRODUCTS: CO, CO₂, phosgene and /or HCl

HAZARDOUS POLYMERIZATION: Will not occur.

Section 11: Toxicological Information

LD50 (oral, rat) = 1600 mg/Kg

LC50 (inhalation, rat) = 88,000 mg/m³/30 min

ROUTES OF ENTRY: Inhalation [Y] Eye Contact [Y] Skin Contact [Y] Skin Absorption [Y] Ingestion [N]

EXPOSURE LIMITS: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.

IRRITANCY OF PRODUCT: N/Av

SENSITIZATION TO PRODUCT / MEDICAL CONDITIONS AGGRAVATED: Prolonged contact with high concentrations can lead to serious kidney and liver damage.

CARCINOGENICITY:

This product contains Methylene Chloride which has been shown to cause cancer in certain laboratory animals when exposed to high vapor concentration over an extended period of time. While not proven to be carcinogenic to humans, if it should be found to be so, risk to health would depend on level and duration of exposure. Exposure to vapor should be minimized until risk to humans has been determined.

TERATOGENICITY / MUTAGENICITY / REPRODUCTIVE TOXICITY: Negative or equivocal results have been obtained in mutagenicity test using mammalian cells or animals. Results of AMES bacterial tests have generally been positive suggesting that genotoxic potential does not appear to be a significant factor in the toxicity of methylene chloride.

TOXICOLOGICAL DATA: N/Av

Section 12: Ecological Information

ENVIRONMENTAL EFFECTS: This product has not been tested for environmental effects.

IMPORTANT ENVIRONMENTAL CHARACTERISTICS: N/Av

AQUATIC TOXICITY: N/Av

Section 13: Disposal Considerations

An aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations. Collected rinsate materials from spills may be hazardous wastes, and therefore subject to local, state and federal regulations.

Section 14: Transportation Information

THIS MATERIAL IS **HAZARDOUS** (Per 49 CFR 172.101) BY THE U.S. DEPARTMENT OF TRANSPORTATION.

NON-BULK SHIPMENTS:

PROPER SHIPPING NAME:	Aerosols
HAZARD CLASS NUMBER and DESCRIPTION:	2.2 (Nonflammable Gas)
UN IDENTIFICATION NUMBER:	UN 1950
PACKING GROUP:	Not Applicable
DOT LABEL(S) REQUIRED:	Nonflammable Gas
NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER, 1996:	126

SHIPMENTS:

MARINE POLLUTANT: This product does not contain any component designated by the DOT to be a Marine Pollutant (49 CFR 172.101, Appendix B).

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is considered as **DANGEROUS GOODS**. Use the above information for the preparation of Canadian shipments.

Section 15: Regulatory Information

US FEDERAL REGULATIONS

OSHA CLASSIFICATION: This product is classified as a "Hazardous Chemical" by definition of Hazard Communication Standard (29 CFR 1910.1200) Occupational exposures to methylene chloride are specifically regulated under 29 CFR 1910.1052

CARCINOGEN STATUS: Methylene chloride is listed by NTP as 'reasonably anticipated to be a human carcinogen' and by IARC as a Group 2B carcinogen.

TOXIC SUBSTANCES CONTROL ACT (TSCA): The product on this SDS, or all of its components, is listed under TSCA.

SARA TITLE III, SECTION 313: The following ingredients are subject to the reporting requirements of Section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CFR Part 372: Methylene Chloride (90.5%).

CLEAN AIR ACT (CAA): The following ingredients appear on the List of Hazardous Air Pollutants (HAP - 42 USC 7412, Title I, Part A, p112): None

CLEAN WATER ACT (CWA): The following ingredients appear on the CWA List of Hazardous Substances (40 CFR 116.4): None

CALIFORNIA PROPOSITION 65: The following ingredients appear of the Proposition 65 list(s): Methylene Chloride (C)

NEW JERSEY RIGHT TO KNOW INFORMATION: (5 most predominant ingredients / hazardous & non-hazardous)

Methylene Chloride CAS# 75-09-2

Carbon Dioxide CAS# 124-38-9

Soy Lecithin CAS# 8002-43-5)

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): This SDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

DOMESTIC SUBSTANCES LIST (DSL): The product on this SDS, or all of its components, is included in the DSL.

Section 16: Other Information

GHS Phrases for Reference (See Sections 2 and 3):

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

EU Classes and Risk Phrases for References (See Sections 2 and 3):

Xi	Irritant
Xn	Harmful
Carc Cat 2	Carcinogen Category 2
R36	Irritating to eyes.
R40	Possible risk of cancer.

Other:

N/E	Not Established
N/Av	Not Available
N/Ap	Not Applicable
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH	National Institute for Occupational Health and Safety
TLV-TWA	Threshold Limit, Time Weighted Average
NAERG	North American Emergency Response Guidebook
WHMIS	Workplace Hazardous Materials Information System

This SDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. KCI provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of KCI. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.



ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Revision Date: 03/25/2021

Date of Issue: 01/27/2017

Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Substance

Product Name: ARMEX™ Blast Media

CAS No: 144-55-8

Intended Use of the Product

Blast media

Name, Address, and Telephone of the Responsible Party

Company

Church & Dwight

500 Charles Ewing Blvd

Ewing Township, NJ 08628

T 1-800-332-5424

www.armex.com

Emergency Telephone Number

Emergency Number : For Medical Emergency: 1-888-234-1828 (USA and Canada), 952-853-1925 (Outside USA and Canada); For Chemical Emergency (CHEMTREC): 1-800-424-9300 (USA and Canada), 1-703-741-5970 (Outside USA and Canada)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

Label Elements

GHS-US/CA Labeling

No labeling applicable

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Name : ARMEX™ Blast Media

CAS No : 144-55-8

Name	Product Identifier	% *	GHS Ingredient Classification
Sodium bicarbonate	(CAS No) 144-55-8	100	Not classified

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Sodium oxides.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing dust. Avoid prolonged contact with eyes, skin and clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Contact competent authorities after a spill. Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water. Lime.

Storage Temperature: < 65 °C (< 150 °F)

Specific End Use(s)

Blast media

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Particulates not otherwise classified (PNOC)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction 15 mg/m ³ Total Dust
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (total) 3 mg/m ³ (respirable)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (nuisance dust-total dust) 3 mg/m ³ (nuisance dust-respirable fraction)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
New Brunswick	OEL TWA (mg/m ³)	3 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction) 10 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended) 3 mg/m ³ (respirable particles, recommended)
Québec	VEMP (mg/m ³)	10 mg/m ³ (including dust, inert or nuisance particulates-total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)

ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: White and brown crystalline powder with brown small particles
Odor	: None
Odor Threshold	: Not available
pH	: 8.2 (1% Solution)
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity / Density	: 1 g/cc Approx.
Specific Gravity	: Not available
Solubility	: Water: 3.4 - 7.7 g/100ml @ 20 °C (68 °F)
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
VOC content	: < 1 %

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water. Lime.

Hazardous Decomposition Products: None known. At high temperature may liberate toxic gases.

ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

pH: 8.2 (1% Solution)

Eye Damage/Irritation: Not classified

pH: 8.2 (1% Solution)

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium bicarbonate (144-55-8)	
LD50 Oral Rat	7334 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Sodium bicarbonate (144-55-8)	
LC50 Fish 1	7100 mg/l Bluegill
EC50 Daphnia 1	4100 mg/l Daphnids
LC50 Fish 2	7700 mg/l Rainbow Trout

Persistence and Degradability

ARMEX™ Blast Media (144-55-8)	
Persistence and Degradability	Not established.

Bioaccumulative Potential

ARMEX™ Blast Media (144-55-8)	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

ARMEX™ Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal and International Regulations

Sodium bicarbonate (144-55-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

Sodium bicarbonate (144-55-8)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 03/25/2021

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

This Product Safety Data Sheet is offered solely for your information, consideration and investigation. Church & Dwight Co., Inc. provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of data contained herein. Church & Dwight Co., Inc. urges persons receiving this information to make their own determination as to the information suitability for their particular application.

Church&Dwight NA GHS SDS 2015



ARMEX™ Profile Blast Media

Profile Formula XL with SupraKleen™

Profile Turbine Formula

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 05/12/2015 Date of issue: 05/12/2015 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Substance

Product Name: ARMEX™ Profile Blast Media

CAS No: 144-55-8

Formula: NaHCO₃

Intended Use of the Product

Blast Media.

Name, Address, and Telephone of the Responsible Party

Company

Church & Dwight

500 Charles Ewing Blvd

Ewing Township, NJ 08628

T 1-800-332-5424

www.churchdwight.com

Emergency Telephone Number

Emergency Number : For Medical Emergency: 1-888-234-1828, For Chemical Emergency: 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling

No labeling applicable

Other Hazards Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Prolonged contact with dust can produce mechanical irritation.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name : Sodium Bicarbonate

CAS No : 144-55-8

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Sodium Bicarbonate	(CAS No) 144-55-8	80-95%	Not classified
Proprietary Insoluble Hard Grit	(CAS No) 1344-28-1	5-20%	Not classified

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Brush off loose particles from skin. Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention if a large amount is swallowed.

Most Important Symptoms and Effects Both Acute and Delayed

General: None expected under normal conditions of use.

Inhalation: Prolonged inhalation of dust may cause respiratory irritation.

ARMEX™ Profile Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.

Eye Contact: Contact may cause irritation due to mechanical abrasion.

Ingestion: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: For surrounding fire: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: NOT FLAMMABLE . Under fire conditions, hazardous fumes will be present.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Sodium oxides.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust or fumes. Avoid skin and eye contact.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Avoid generation of dust during clean-up of spills. Keep in suitable, closed containers for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated, material emits irritating fumes.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in the original containers. Store in a dry, cool and well-ventilated place. Keep container closed when not in use. The usual good standards of industrial hygiene should be maintained. Avoid the formation and dispersion of dust. Static sparks may be generated during the blasting operation. Special consideration should be given to work areas and applications in which flammable or combustible vapors, mists, gasses or clouds of combustible dust are either present or may be released. See Section 8 and product Static Electricity Hazard Information Bulletin for more information.

Incompatible Materials: Acids. Water. Lime.

Storage Temperature: < 65 °C (150 °F)

ARMEX™ Profile Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Specific End Use(s) Abrasive blast media

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Particulates not otherwise classified (PNOC)		
USA ACGIH	ACGIH TWA (mg/m ³)	3 mg/m ³ Respirable fraction 10 mg/m ³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction 15 mg/m ³ Total Dust
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (total)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (total dust)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended)
New Brunswick	OEL TWA (mg/m ³)	3 mg/m ³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended)
Nunavut	OEL TWA (mg/m ³)	5 mg/m ³ (respirable mass)
Northwest Territories	OEL TWA (mg/m ³)	5 mg/m ³ (respirable mass)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (inhalable particles, recommended)
Québec	VEMP (mg/m ³)	10 mg/m ³ (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 6 mg/m ³ (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (insoluble or poorly soluble-inhalable fraction) 3 mg/m ³ (insoluble or poorly soluble-respirable fraction)

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Safety glasses. Dust formation: dust mask.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: No special constraints. Prevent contamination of water and soil. No special requirements with respect to chemical exposure other than those noted above. However, when used in blasting, workers must adhere to good operating procedures designed to prevent physical contact with pressurized streams of ARMEX Blast Media and surface coatings being removed. See operating instructions for blasting equipment. To minimize static electricity hazards, properly ground the equipment and work piece, use a conductive nozzle, and wet blast whenever possible. Conduct the blasting operation in non-hazardous areas if possible.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: White, crystalline powder
Odor	: None

ARMEX™ Profile Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Odor Threshold	: Not available
pH	: 8.2 (1% Solution)
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Upper/Lower Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific gravity / density	: 62 lb/ft ³
Specific Gravity	: Not available
Solubility	: Water: 8.6 g/100ml @ 20 °C (68 °F)
Partition Coefficient: N-octanol/water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Decomposes slowly on exposure to water (moisture).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Exposure to moisture or moist air. Temperatures above 150°F (65 °C).

Incompatible Materials: Acids. Water. Lime.

Hazardous Decomposition Products: None known. At high temperature may liberate toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data:

ARMEX™ MB-12 Blast Media	
LD50 Oral Rat	7.3 g/kg
LC50 Inhalation Rat	> 4.7 mg/l/4h

Skin Corrosion/Irritation: Not classified [pH: 8.2 (1% Solution)]

Serious Eye Damage/Irritation: Not classified [pH: 8.2 (1% Solution)]

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged inhalation of dust may cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Skin contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Contact may cause irritation due to mechanical abrasion.

Symptoms/Injuries After Ingestion: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

Chronic Symptoms: None expected under normal conditions of use.

ARMEX™ Profile Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

SECTION 12: ECOLOGICAL INFORMATION

Toxicity No additional information available

ARMEX™ Profile Blast Media	
LC50 Fish 1	7100 mg/l Bluegill
EC50 Daphnia 1	4100 mg/l
LC 50 Fish 2	7700 mg/l Rainbow Trout
Sodium Bicarbonate (144-55-8)	
LC50 Fish 1	8250 - 9000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2350 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence and Degradability Not established

Bioaccumulative Potential Not established

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal & International Regulations

Sodium Bicarbonate (144-55-8)	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
Listed on the Korean ECL (Existing Chemicals List)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

Sodium Bicarbonate (144-55-8)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 05/12/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Party Responsible for the Preparation of This Document

Church & Dwight
500 Charles Ewing Blvd
Ewing Township, NJ 08628
T 1-800-332-5424

ARMEX™ Profile Blast Media

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

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North America GHS US 2012 & WHMIS 2



Safety Data Sheet

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Document Group:	24-2437-2	Version Number:	8.00
Issue Date:	07/11/23	Supersedes Date:	11/28/22

Product identifier

Bondo® Fiberglass Resin Kit, P.N. 401, 401C, 402, 402M, 402C, 402ES, 402T, 402Z, 404, 404C, 404Z

ID Number(s):

60-4550-8287-9, 60-4550-8288-7, 60-4550-8297-8, 60-4550-8298-6, 60-4550-8299-4

7010363199, 7010309274, 7010363203, 7010328018, 7010328016

Recommended use

Automotive, Repairing Auto Body

Supplier's details

MANUFACTURER:	3M
DIVISION:	Construction and Home Improvement Markets

ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

39-6887-2, 43-8700-7, 24-2429-9, 24-2440-6

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Document Group: 24-2440-6
Issue Date: 06/28/23

Version Number: 13.00
Supersedes Date: 06/07/22

SECTION 1: Identification

1.1. Product identifier

3M™ Bondo® MEKP Liquid Hardener for Fiberglass Resin Kit, P.N. 401, 401C, 402, 402C, 402T, 402Z, 404, 404C, 404Z

Product Identification Numbers

LB-K100-0411-2, LB-K100-0414-8, LB-K100-0414-9

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Curing Agent

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Construction and Home Improvement Markets
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Organic Peroxide: Type D.
Acute Toxicity (oral): Category 4.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 1C.
Reproductive Toxicity: Category 2.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Corrosion | Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Heating may cause a fire.

Harmful if swallowed.

Causes severe skin burns and eye damage.

Suspected of damaging fertility or the unborn child.

Precautionary Statements**General:**

Keep out of reach of children.

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep away from clothing and other combustible materials.

Keep only in original container.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves, protective clothing, and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage:

Protect from sunlight.

Store at temperatures not exceeding 25°C/77°F. Keep cool.

Store locked up.

Store away from other materials.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.

3% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Dimethyl Phthalate	131-11-3	30 - 60 Trade Secret *
Methyl Ethyl Ketone Peroxide	1338-23-4	15 - 40 Trade Secret *
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	10 - 30 Trade Secret *
Hydrogen Peroxide	7722-84-1	< 5 Trade Secret *
Methyl Ethyl Ketone	78-93-3	1 - 5 Trade Secret *
Water	7732-18-5	< 3 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide
Irritant Vapors or Gases

Condition

During Combustion
During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Protect from sunlight. Store at temperatures not exceeding 25°C/77°F. Keep cool. Keep only in original container. Store away from acids. Store away from oxidizing agents. Store away from other materials. Keep/store away from clothing and other combustible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Dimethyl Phthalate	131-11-3	ACGIH	TWA:5 mg/m3	
Dimethyl Phthalate	131-11-3	OSHA	TWA:5 mg/m3	
Methyl Ethyl Ketone Peroxide	1338-23-4	ACGIH	CEIL:0.2 ppm	
Hydrogen Peroxide	7722-84-1	ACGIH	TWA:1 ppm	A3: Confirmed animal carcin.
Hydrogen Peroxide	7722-84-1	OSHA	TWA:1.4 mg/m3(1 ppm)	
Methyl Ethyl Ketone	78-93-3	ACGIH	TWA:200 ppm;STEL:300 ppm	
Methyl Ethyl Ketone	78-93-3	OSHA	TWA:590 mg/m3(200 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield
Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber
Fluoroelastomer
Neoprene

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber
Apron - Neoprene

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state
Color

Liquid
Colorless

Odor

Odor threshold

pH

Slight Odor

No Data Available

No Data Available

Melting point	<i>No Data Available</i>
Boiling Point	244 °F
Flash Point	> 200 °F [Test Method:Closed Cup] [Details:No flash to boiling point.]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	> 1 Units not avail. or not appl.
Density	1.1 g/ml
Specific Gravity	1.1 [Ref Std:WATER=1]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Hazardous Air Pollutants	43.1 % weight
Volatile Organic Compounds	39 g/l [Test Method:calculated SCAQMD rule 443.1]
Volatile Organic Compounds	3.5 % weight [Test Method:Tested per ASTM protocol]
Percent volatile	45.0 % weight
VOC Less H2O & Exempt Solvents	39 g/l [Test Method:calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Light

Sparks and/or flames

Temperatures above the boiling point

10.5. Incompatible materials

Strong oxidizing agents

Alkali and alkaline earth metals

Strong acids

10.6. Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be

reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

May be harmful if inhaled.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

May cause additional health effects (see below).

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

Harmful if swallowed. Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Dermal Effects: Signs/symptoms may include changes in skin pigmentation and/or coloration.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
Dimethyl Phthalate	Inhalation-Dust/Mist (4 hours)	Other	LC50 > 15.1 mg/l
Dimethyl Phthalate	Dermal	Rabbit	LD50 > 11,940 mg/kg
Dimethyl Phthalate	Ingestion	Rat	LD50 6,800 mg/kg
Methyl Ethyl Ketone Peroxide	Dermal	Rabbit	LD50 4,000 mg/kg
Methyl Ethyl Ketone Peroxide	Inhalation-Vapor (4	Rat	LC50 15.4 mg/l

	hours)		
Methyl Ethyl Ketone Peroxide	Ingestion	Rat	LD50 484 mg/kg
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	Dermal	Guinea pig	LD50 > 18,800 mg/kg
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 8 mg/l
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	Ingestion	Rat	LD50 > 3,200 mg/kg
Methyl Ethyl Ketone	Dermal	Rabbit	LD50 > 8,050 mg/kg
Methyl Ethyl Ketone	Inhalation-Vapor (4 hours)	Rat	LC50 34.5 mg/l
Methyl Ethyl Ketone	Ingestion	Rat	LD50 2,737 mg/kg
Hydrogen Peroxide	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hydrogen Peroxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 2 mg/l
Hydrogen Peroxide	Ingestion	Rat	LD50 1,193 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Methyl Ethyl Ketone Peroxide	Rabbit	Corrosive
Methyl Ethyl Ketone	Rabbit	Minimal irritation
Hydrogen Peroxide	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Methyl Ethyl Ketone Peroxide	Human	Corrosive
Methyl Ethyl Ketone	Rabbit	Severe irritant
Hydrogen Peroxide	Rabbit	Corrosive

Skin Sensitization

Name	Species	Value
Methyl Ethyl Ketone Peroxide	Human	Not classified
Hydrogen Peroxide	Guinea pig	Not classified

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Methyl Ethyl Ketone Peroxide	In vivo	Not mutagenic
Methyl Ethyl Ketone Peroxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl Ethyl Ketone	In Vitro	Not mutagenic
Hydrogen Peroxide	In vivo	Not mutagenic
Hydrogen Peroxide	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Methyl Ethyl Ketone Peroxide	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
Methyl Ethyl Ketone	Inhalation	Human	Not carcinogenic
Hydrogen Peroxide	Dermal	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Hydrogen Peroxide	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone Peroxide	Dermal	Not classified for female reproduction	Rat	NOAEL 70 mg/kg/day	13 weeks
Methyl Ethyl Ketone Peroxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 75 mg/kg/day	premating & during gestation
Methyl Ethyl Ketone Peroxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 75 mg/kg/day	28 days
Methyl Ethyl Ketone Peroxide	Dermal	Not classified for male reproduction	Rat	NOAEL 70 mg/kg/day	13 weeks
Methyl Ethyl Ketone Peroxide	Ingestion	Not classified for development	Rat	NOAEL 50 mg/kg/day	premating & during gestation
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	Ingestion	Toxic to development	Rabbit	NOAEL 300 mg/kg/day	during gestation
Methyl Ethyl Ketone	Inhalation	Not classified for development	Rat	LOAEL 8.8 mg/l	during gestation
Hydrogen Peroxide	Ingestion	Not classified for female reproduction	Rat	LOAEL 5 mg/kg/day	6 months
Hydrogen Peroxide	Ingestion	Not classified for male reproduction	Rat	LOAEL 5 mg/kg/day	6 months
Hydrogen Peroxide	Ingestion	Not classified for development	Rat	LOAEL 5 mg/kg/day	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone Peroxide	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Methyl Ethyl Ketone	Inhalation	central nervous system depression	May cause drowsiness or dizziness	official classification	NOAEL Not available	
Methyl Ethyl Ketone	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	not applicable
Methyl Ethyl Ketone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 1,080 mg/kg	not applicable
Hydrogen Peroxide	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	
Hydrogen Peroxide	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Ethyl Ketone Peroxide	Dermal	heart hematopoietic system liver	Not classified	Rat	NOAEL 70 mg/kg/day	13 weeks

		immune system nervous system kidney and/or bladder respiratory system				
Methyl Ethyl Ketone Peroxide	Ingestion	liver kidney and/or bladder	Not classified	Rat	LOAEL 97 mg/kg/day	7 weeks
Methyl Ethyl Ketone	Dermal	nervous system	Not classified	Guinea pig	NOAEL Not available	31 weeks
Methyl Ethyl Ketone	Inhalation	liver kidney and/or bladder heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles	Not classified	Rat	NOAEL 14.7 mg/l	90 days
Methyl Ethyl Ketone	Ingestion	liver	Not classified	Rat	NOAEL Not available	7 days
Methyl Ethyl Ketone	Ingestion	nervous system	Not classified	Rat	NOAEL 173 mg/kg/day	90 days
Hydrogen Peroxide	Ingestion	hematopoietic system	Not classified	Rat	NOEL 0.005 mg/kg/day	6 months
Hydrogen Peroxide	Ingestion	liver kidney and/or bladder	Not classified	Mouse	NOAEL Not available	35 weeks

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Organic peroxide

Health Hazards

Acute toxicity

Hazard Not Otherwise Classified (HNOC)

Reproductive toxicity

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Dimethyl Phthalate	131-11-3	Trade Secret 30 - 60

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 3 **Flammability:** 1 **Instability:** 0 **Special Hazards:** Oxidizer

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: *3 **Flammability:** 1 **Physical Hazard:** 0 **Personal Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use

and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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Safety Data Sheet

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Document Group: 24-2429-9
Issue Date: 06/20/23

Version Number: 6.00
Supersedes Date: 05/19/21

SECTION 1: Identification

1.1. Product identifier

3M™ Bondo® Fiberglass Resin, P.N. 401, 401C, 402, 402C, 402ES, 402T, 402Z, 404, 404C, 404Z

Product Identification Numbers

LB-K100-1567-8, LB-K100-1567-9, LB-K100-1568-0, LB-K100-0410-9, LB-K100-0411-0, LB-K100-0411-1, LB-K100-0537-7, LB-K100-0537-8, LB-K100-0537-9, LB-K100-0538-0, LB-K100-0538-1, LB-K100-0538-2, 41-0003-6688-4

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Fiberglass Repair Resin

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Construction and Home Improvement Markets
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Flammable Liquid: Category 3.
Acute Toxicity (inhalation): Category 4.
Serious Eye Damage/Irritation: Category 2B.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Flammable liquid and vapor.

Causes eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Suspected of causing cancer.

Causes damage to organs:

liver |

sensory organs |

Causes damage to organs through prolonged or repeated exposure:

sensory organs |

May cause damage to organs through prolonged or repeated exposure:

liver |

Precautionary Statements**General:**

Keep out of reach of children.

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

64% of the mixture consists of ingredients of unknown acute oral toxicity.

64% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Polymer 2	Trade Secret*	30 - 60 Trade Secret *
Styrene Monomer	100-42-5	15 - 40 Trade Secret *
Polymer 1	Trade Secret*	7 - 13 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details. Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Cover spill area with a fire-extinguishing foam. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Styrene Monomer	100-42-5	ACGIH	TWA:10 ppm;STEL:20 ppm	A3: Confirmed animal carcin., Ototoxicant
Styrene Monomer	100-42-5	OSHA	TWA:100 ppm;CEIL:200 ppm	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Fluoroelastomer

Polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state

Liquid

Color

Light Straw

Specific Physical Form:	Paste
Odor	Pungent Organic solvent
Odor threshold	<i>No Data Available</i>
pH	<i>No Data Available</i>
Melting point	<i>No Data Available</i>
Boiling Point	180 - 415 °F
Flash Point	88 °F [<i>Test Method:</i> Closed Cup]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	1.1 %
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	3.45 mmHg
Vapor Density	<i>No Data Available</i>
Density	1.14 g/ml
Specific Gravity	1.14 [<i>Ref Std:</i> WATER=1]
Solubility in Water	Negligible
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	1,424 centipoise [<i>Details:</i> @40C]
Hazardous Air Pollutants	33.8 lb HAPS/lb solids [<i>Test Method:</i> Calculated]
Volatile Organic Compounds	386 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1]
Volatile Organic Compounds	33.8 % weight [<i>Test Method:</i> calculated per CARB title 2]
Percent volatile	33.8 % weight
VOC Less H2O & Exempt Solvents	386 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat

Sparks and/or flames

10.5. Incompatible materials

Strong acids

Strong bases

Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons	Not Specified
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Harmful if inhaled.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
Styrene	100-42-5	Grp. 2A: Probable human carc.	International Agency for Research on Cancer
STYRENE	100-42-5	Anticipated human carcinogen	National Toxicology Program Carcinogens

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE >10 - =20 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
Styrene Monomer	Dermal	Rat	LD50 > 2,000 mg/kg
Styrene Monomer	Inhalation-Vapor (4 hours)	Rat	LC50 11.8 mg/l
Styrene Monomer	Ingestion	Rat	LD50 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Styrene Monomer	Professional judgement	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Styrene Monomer	Professional judgement	Moderate irritant

Skin Sensitization

Name	Species	Value
Styrene Monomer	Guinea pig	Not classified

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Styrene Monomer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Styrene Monomer	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Styrene Monomer	Ingestion	Mouse	Carcinogenic
Styrene Monomer	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Styrene Monomer	Ingestion	Not classified for female reproduction	Rat	NOAEL 21 mg/kg/day	3 generation
Styrene Monomer	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene Monomer	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.1 mg/l	2 generation
Styrene Monomer	Ingestion	Not classified for male reproduction	Rat	NOAEL 400 mg/kg/day	60 days
Styrene Monomer	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during gestation
Styrene Monomer	Inhalation	Not classified for development	Multiple animal species	NOAEL 2.1 mg/l	during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Styrene Monomer	Inhalation	auditory system	Causes damage to organs	Multiple animal species	LOAEL 4.3 mg/l	not available
Styrene Monomer	Inhalation	liver	Causes damage to organs	Mouse	LOAEL 2.1 mg/l	not available
Styrene Monomer	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	occupational exposure
Styrene Monomer	Inhalation	respiratory irritation	May cause respiratory irritation	Human and animal	NOAEL Not available	
Styrene Monomer	Inhalation	endocrine system	Not classified	Rat	NOAEL Not available	not available
Styrene Monomer	Inhalation	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2.1 mg/l	not available

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Styrene Monomer	Inhalation	auditory system	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL not available	occupational exposure
Styrene Monomer	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Styrene Monomer	Inhalation	liver	May cause damage to organs though prolonged or repeated exposure	Mouse	LOAEL 0.85 mg/l	13 weeks
Styrene Monomer	Inhalation	nervous system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	LOAEL 1.1 mg/l	not available
Styrene Monomer	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 0.85 mg/l	7 days
Styrene Monomer	Inhalation	endocrine system	Not classified	Rat	NOAEL 0.6 mg/l	10 days
Styrene Monomer	Inhalation	respiratory system	Not classified	Multiple animal species	LOAEL 0.09 mg/l	not available
Styrene Monomer	Inhalation	heart gastrointestinal tract bone, teeth, nails, and/or hair muscles kidney	Not classified	Multiple animal species	NOAEL 4.3 mg/l	2 years

		and/or bladder				
Styrene Monomer	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 500 mg/kg/day	8 weeks
Styrene Monomer	Ingestion	immune system	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL Not available	not available
Styrene Monomer	Ingestion	liver kidney and/or bladder	Not classified	Rat	NOAEL 677 mg/kg/day	6 months
Styrene Monomer	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 600 mg/kg/day	470 days
Styrene Monomer	Ingestion	heart respiratory system	Not classified	Rat	NOAEL 35 mg/kg/day	105 weeks

Aspiration Hazard

Name	Value
Styrene Monomer	Aspiration hazard

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate uncured product in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:**Physical Hazards**

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Acute toxicity

Carcinogenicity

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**Ingredient**

Styrene Monomer

C.A.S. No

100-42-5

% by Wt

Trade Secret 15 - 40

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**SECTION 16: Other information****NFPA Hazard Classification****Health:** 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Document Group: 24-2429-9**Issue Date:** 06/20/23**Version Number:** 6.00**Supersedes Date:** 05/19/21

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3M USA SDSs are available at www.3M.com



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Document Group: 39-6887-2
Issue Date: 06/28/23

Version Number: 1.00
Supersedes Date: Initial Issue

Product identifier

Bondo® Plastic Spreaders 357, 358

Recommended use

Automotive

Supplier's details

MANUFACTURER:	3M
DIVISION:	Construction and Home Improvement Markets
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

This Article Information Letter is provided as a courtesy in response to a customer request. A Safety Data Sheet (SDS) has not been prepared for these product(s) because they are articles. Articles are not subject to the Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200(b)(6)(v)). As defined in this standard: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical or health risk to employees.

This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

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Document Group:	43-8700-7	Version Number:	2.00
Issue Date:	06/26/23	Supersedes Date:	11/02/22

Product identifier

3M™ Bondo Fiberglass Cloth, 499, 499SRP, 20128, 36128

Product Identification Numbers

LB-K100-0428-0, LB-K100-0714-7, 60-4550-5676-6, 60-4550-6835-7, 60-4550-8121-0, 60-4550-9172-2, 60-4551-0053-1
7000120014, 7100151527, 7010364420

Recommended use

Automotive

Supplier's details

MANUFACTURER:	3M
DIVISION:	Construction and Home Improvement Markets
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

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Material Safety Data Sheet

**CHEMTREC Transportation
Emergency Phone: 800-
424-9300**

**Pittsburgh Poison Control
Center
Health Emergency No.:
412-681-6669**

•NOTE: The CHEMTREC Transportation
•Emergency Phone is to be used only in the
•event of chemical emergencies involving a
•spill, leak, fire, exposure or accident
•involving chemicals

Section 1 - Chemical Product / Company Information

Product Name: CARBOGUARD 635 PART B

**Revision
Date:** 09/21/2011

**Identification
Number:** PLMSDS 1020B1NL

Supersedes : 08/04/2008

**Product
Use/Class:** Cross-Linked Epoxy Polymeric
Amine - FOR INDUSTRIAL USE
ONLY

Preparer: Regulatory, Department

Manufacturer: Carboline Company
2150 Schuetz Road
St. Louis, MO 63146
(800) 848-4645

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA-CEIL
ALKYL PHENOL POLYAMINE	TRADE SECRET	35.0	NE	NE	NE	NE
MICROCRYSTALLINE SILICA	14808-60-7	25.0	0.025 MG/M3 (respirable)	N/E	0.1 MG/M3 (respirable)	N/E
BARITE	13462-86-7	25.0	0.5 MGM3	N/E	0.5 MGM3	N/E
META-XYLENE	108-38-3	10.0	100 PPM	150 PPM	435 MG/M3	N/E
N-BUTANOL	71-36-3	5.0	20 PPM	50 PPM	100 PPM	150 MGM3
PARA-XYLENE	106-42-3	5.0	100 PPM	150 PPM	435 MGM3	N/E
AROMATIC HYDROCARBON	64742-95-6	5.0	N/E	N/E	N/E	N/E
ETHYL BENZENE	100-41-4	5.0	20 PPM	N/E	435 MGM3	N/E
ORTHO-XYLENE	95-47-6	5.0	100 PPM	150 PPM	435 MG/M3	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	5.0	NE	N/E	NE	NE

Section 3 - Hazards Identification

Emergency Overview: Warning! Flammable. Harmful if inhaled. Causes eye and skin irritation. Aspiration may cause lung damage. May cause dizziness and drowsiness. Keep away from heat, sparks, flame. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Do not swallow. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Contains SILICA which can cause cancer. Risk of Cancer depends on duration and level of exposure.

Effects Of Overexposure - Eye Contact: Can cause eye burns.

Effects Of Overexposure - Skin Contact: May cause allergic skin reaction. May be harmful if absorbed through the skin. Can cause skin burns.

Effects Of Overexposure - Inhalation: Harmful if inhaled, may affect the brain or nervous system, causing dizziness, headache, or nausea. May cause nose and throat irritation. May cause lung irritation. May cause allergic respiratory reaction, effects may be permanent.

Effects Of Overexposure - Ingestion: Harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Crystalline silica is known to cause silicosis. Crystalline silica (Quartz) is classified as a known human carcinogen (Group 1) by IARC. Exposure is by route of inhalation. If material is in a liquid matrix it is unlikely to be inhaled. However, when sanding or grinding the finished product, there may be potential for crystalline silica to become airborne. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Medical Conditions Prone to Aggravation by Exposure: If sensitized to amines, epoxies, or other chemicals do not use. See a physician if a medical condition exists. If you have a condition that could be aggravated by exposure to dust or organic vapors, see a physician prior to use.

Section 4 - First Aid Measures

First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Launder clothing before reuse. If rash or irritation develops, consult a physician.

First Aid - Inhalation: If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe.

First Aid - Ingestion: If swallowed do not induce vomiting. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point, F: 80F (26C)
(Setaflash)

Lower Explosive Limit, %: 0.9
Upper Explosive Limit, %: 11.2

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Flammable Liquid. Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and to wear conductive and non-sparking shoes.

Special Firefighting Procedures: Flammable. Cool fire-exposed containers using water spray.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow exposure controls/personal protection guidelines in Section 8. Contain and soak up residual with an absorbent (clay or sand). Take up absorbent material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section 15 for SARA Title III and CERCLA information.

Section 7 - Handling And Storage

Handling: Do not get in eyes, on skin, or on clothing. Keep container tightly closed when not in use. Wear personal protection equipment. Do not breathe vapors. Wash thoroughly after handling. If pouring

or transferring materials, ground all containers and tools. Do not weld, heat, cut or drill on full or empty containers. Use only in accordance with Carboline application instructions, container label and Product Data Sheet. Avoid breathing vapors or spray mist.

Storage: Keep away from heat, sparks, open flames and oxidizing agents. Keep containers closed. Store in a cool, dry place with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use explosion-proof ventilation when required to keep below health exposure guidelines and Lower Explosion Limit (LEL).

Respiratory Protection: Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use. For silica containing coatings in a liquid state, and/or if no exposure limits are established in Section 2 above, supplied air respirators are generally not required.

Skin Protection: Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure.

Eye Protection: Recommend safety glasses with side shields or chemical goggles to avoid eye contact.

Other protective equipment: Eye wash and safety showers should be readily available.

Hygienic Practices: Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and allow hazardous materials to pass through. Check shoes carefully after soaking before reuse.

Section 9 - Physical And Chemical Properties

Boiling Range:	150 F (66 C) - 334 F (168 C)	Vapor Density:	Heavier than Air
Odor:	Amine	Odor Threshold:	N/D
Appearance:	Viscous Brown Liquid	Evaporation Rate:	Slower Than Ether
Solubility in H2O:	N/D		
Freeze Point:	N/D	Specific Gravity:	1.45
Vapor Pressure:	N/D	PH:	N/D
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Heat, sparks and open flames.

Incompatibility: Keep away from strong oxidizing agents, heat and open flames.

Hazardous Decomposition Products: Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N/D

Product LC50: N/D

Chemical Name	CAS Number	LD50	LC50
ALKYL PHENOL POLYAMINE	TRADE SECRET	NOT AVAILABLE	NOT AVAILABLE
MICROCRYSTALLINE SILICA	14808-60-7	NOT AVAILABLE	NOT AVAILABLE
BARITE	13462-86-7	NOT AVAILABLE	NOT AVAILABLE
META-XYLENE	108-38-3	NOT AVAILABLE	NOT AVAILABLE
N-BUTANOL	71-36-3	2500MG/KG RAT, ORAL	>800PPM/4HRS RAT, INHALATION
PARA-XYLENE	106-42-3	NOT AVAILABLE	NOT AVAILABLE
AROMATIC HYDROCARBON	64742-95-6	4700 MG/KG, ORAL, RAT	3670 PPM/8 HOURS, RAT, INHALATION
ETHYL BENZENE	100-41-4	3500 MG/KG RAT, ORAL	NOT AVAILABLE
ORTHO-XYLENE	95-47-6	NOT AVAILABLE	NOT AVAILABLE
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	2169 MG/KG ORAL	NOT AVAILABLE

Section 12 - Ecological Information

Ecological Information: No data

Section 13 - Disposal Information

Disposal Information: Dispose of in accordance with State, Local, and Federal Environmental regulations. Responsibility for proper waste disposal is with the owner of the waste.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group:	III
DOT Technical Name:	N/A	Hazard Subclass:	N/A
DOT Hazard Class:	3	Resp. Guide Page:	128
DOT UN/NA Number:	UN 1263		

Additional Notes: None.

Section 15 - Regulatory Information

CERCLA - SARA HAZARD CATEGORY

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
META-XYLENE	108-38-3
N-BUTANOL	71-36-3
PARA-XYLENE	106-42-3
ETHYL BENZENE	100-41-4
ORTHO-XYLENE	95-47-6

TOXIC SUBSTANCES CONTROL ACT

All components of this product are listed on the TSCA inventory.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(B) Substances exist in this product

U.S. STATE REGULATIONS AS FOLLOWS:

NEW JERSEY RIGHT-TO-KNOW

The following materials are non-hazardous, but are among the top five components in this product.

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

CALIFORNIA PROPOSITION 65

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS Number</u>
MICROCRYSTALLINE SILICA	14808-60-7
ETHYL BENZENE	100-41-4
CUMENE	98-82-8

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards:

<u>Chemical Name</u>	<u>CAS Number</u>
TOLUENE	108-88-3

INTERNATIONAL REGULATIONS AS FOLLOWS:

CANADIAN WHMIS

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B2 D2A D2B

Section 16 - Other Information

HMIS Ratings

Health: 3 **Flammability:** 3 **Reactivity:** 1 **Personal Protection:** X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 295

REASON FOR REVISION: Changes made in Section(s): 1, 2, 5, 9, 11, and 15

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations



SAFETY DATA SHEET

Carboline Urethane Converter 811

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Carboline Urethane Converter 811
Product number 820UC811-B

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Supplier Akis Paint and Chemical Inc.
 Ali Osman Sönmez Cad. No:4
 DOSAB-BURSA/TURKEY
 T: +902242610537
 F: +902242610542
 www.akisboya.com

Contact person Tolga Dıraz - Teknik Müdür, Resmiye Kovancı Savaş - Fabrika Müdürü, H. Tuğba Başkurt
 Fildişi - Kalite Güvence Sorumlusu

1.4. Emergency telephone number

Emergency telephone Company Tel: +90 224 261 05 37 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Flam. Liq. 3 - H226
Health hazards Acute Tox. 4 - H332 Skin Sens. 1 - H317 STOT SE 3 - H335
Environmental hazards Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) Xn; R20. Xi; R37. R52/53, R10, R43

2.2. Label elements

Pictogram



Signal word Warning

Hazard statements H226 Flammable liquid and vapour.
 H317 May cause an allergic skin reaction.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H412 Harmful to aquatic life with long lasting effects.

Carboline Urethane Converter 811

Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P240 Ground/bond container and receiving equipment.
	P241 Use explosion-proof electrical equipment.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P261 Avoid breathing vapour/spray.
	P271 Use only outdoors or in a well-ventilated area.
	P272 Contaminated work clothing should not be allowed out of the workplace.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P302+P352 IF ON SKIN: Wash with plenty of water.
	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P312 Call a POISON CENTER/doctor if you feel unwell.
	P321 Specific treatment (see medical advice on this label).
	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
	P403+P235 Store in a well-ventilated place. Keep cool.
	P405 Store locked up.
	P501 Dispose of contents/container in accordance with national regulations.
Contains	hexamethylene-1,6-diisocyanate homopolymer, Low boiling point naphtha - unspecified,
	hexamethylene-di-isocyanate

2.3. Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

hexamethylene-1,6-diisocyanate homopolymer		80-95%
CAS number: 28182-81-2		EC number: 500-060-2
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H332	Xn; R20. Xi; R37. R43	
Skin Sens. 1 - H317		
STOT SE 3 - H335		
n-butyl acetate		1-5%
CAS number: 123-86-4		EC number: 204-658-1
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10, R66, R67	
STOT SE 3 - H336		

Carboline Urethane Converter 811

Low boiling point naphtha - unspecified		1-5%
CAS number: 64742-95-6 EC number: 265-199-0		
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) Xn; R65. Xi; R37. N; R51/53. R10, R67	
hexamethylene-di-isocyanate		<1%
CAS number: 822-06-0 EC number: 212-485-8		
Classification Acute Tox. 4 - H302 Acute Tox. 1 - H330 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. Chemical burns must be treated by a physician.
Inhalation	If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. First aid personnel should wear appropriate protective equipment during any rescue. If spray/mist has been inhaled, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Rinse nose and mouth with water. Consult a physician for specific advice. Keep affected person warm and at rest. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove affected person from source of contamination. Remove contact lenses, if present and easy to do. Continue rinsing. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	The product contains organic solvents. Toxic if inhaled.

Carboline Urethane Converter 811

Ingestion This product is corrosive. Liquid irritates mucous membranes and may cause abdominal pain if swallowed. May cause chemical burns in mouth and throat.

Skin contact Causes severe burns.

Eye contact Redness. Conjunctivitis, irritation, tearing. May cause chemical eye burns.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

Specific treatments No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use foam, carbon dioxide, dry powder or water fog to extinguish.

5.2. Special hazards arising from the substance or mixture

Specific hazards Not known. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

Hazardous combustion products None known.

5.3. Advice for firefighters

Protective actions during firefighting Move containers from fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses. Stop leak if safe to do so. Contain and collect extinguishing water. Ventilate closed spaces before entering them. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure procedures and training for emergency decontamination and disposal are in place. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Take care as floors and other surfaces may become slippery. Ensure suitable respiratory protection is worn during removal of spillages in confined areas.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. May accumulate in soil and water systems.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Large Spillages: Collect spillage for reclamation or absorb in vermiculite, dry sand or similar material. Flush contaminated area with plenty of water. Small Spillages: Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Leave small quantities to evaporate, if safe to do so. Allow small quantities to evaporate to the atmosphere in a safe, open place.

6.4. Reference to other sections

Carboline Urethane Converter 811

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Obtain special instructions before use. Avoid contact with skin, eyes and clothing. Read label before use. Wear protective clothing as described in Section 8 of this safety data sheet. For professional users only.

Advice on general occupational hygiene Take off contaminated clothing. Promptly remove any clothing that becomes wet or contaminated. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Contaminated clothing should be placed in a closed container for disposal or decontamination. Good personal hygiene procedures should be implemented. Provide eyewash station. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Protect from sunlight. Keep away from food, drink and animal feeding stuffs. Keep containers upright.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Clean equipment and the work area every day.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Thermal hazards

If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Carboline Urethane Converter 811

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Homogeneous
Colour	Clear.
Flash point	>23°C; <60°C
Relative density	1,08–1,13 gr/cm ³ (20°C)

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products	Decomposition at ambient temperatures may generate the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	This product is toxic. Allergic skin reaction may be observed in hypersensitive personnel. Harmful if swallowed.

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	1,222.0

Skin corrosion/irritation

Skin corrosion/irritation	No information available.

Respiratory sensitisation

Respiratory sensitisation	Sensitising.

Skin sensitisation

Skin sensitisation	Sensitising.

Carcinogenicity

Carcinogenicity	No information available.

Reproductive toxicity

Reproductive toxicity - fertility	No information available.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Data lacking.

Carboline Urethane Converter 811

Inhalation	The product contains organic solvents. May cause drowsiness or dizziness.
Ingestion	May be harmful if swallowed. May cause stomach pain or vomiting.
Skin contact	Liquid may irritate skin.
Eye contact	May irritate eyes.

SECTION 12: Ecological Information

Ecotoxicity	Dangerous for the environment. The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential. May cause long lasting harmful effects to aquatic life. The product may have adverse effects on organisms in soil and water.

12.1. Toxicity

Toxicity	No effects known.

12.2. Persistence and degradability

Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential	Not known.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and local regulations. Product residues retained in emptied containers can be hazardous.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263
UN No. (ADN)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT RELATED MATERIAL

Carboline Urethane Converter 811

Proper shipping name (IMDG) PAINT RELATED MATERIAL

Proper shipping name (ICAO) PAINT RELATED MATERIAL

Proper shipping name (ADN) PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Carboline Urethane Converter 811

EU legislation

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data	This SDS has been created as a result of observations, measurements on the product related to the product and the data that raw material suppliers provide
Revision comments	This is first issue.
Issued by	Mr. Tolga DIRAZ - Certified SDS Author - Certificate No: 01.40.08/06.03.2015 / tdiraz@iyigullu.com.tr / +90 224 261 05 37
Revision	0
Supersedes date	28/12/2015
SDS number	4923
Risk phrases in full	R10 Flammable. R20 Harmful by inhalation. R23 Toxic by inhalation. R36/37/38 Irritating to eyes, respiratory system and skin. R37 Irritating to respiratory system. R42/43 May cause sensitisation by inhalation and skin contact. R43 May cause sensitisation by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains hexamethylene-di-isocyanate. May produce an allergic reaction.



Material Safety Data Sheet

**CHEMTREC Transportation
Emergency Phone: 800-424-
9300**

**Pittsburgh Poison Control
Center
Health Emergency No.: 412-
681-6669**

•NOTE: The CHEMTREC Transportation
•Emergency Phone is to be used only in the
•event of chemical emergencies involving a
•spill, leak, fire, exposure or accident
•involving chemicals

Section 1 - Chemical Product / Company Information

Product Name: CARBOMASTIC 615 PART B
Identification Number: PLMSDS 1049B1NL
Product Use/Class: FOR INDUSTRIAL USE ONLY

Revision Date: 02/23/2011

Supersedes : 02/23/2011

Preparer: Regulatory, Department

Manufacturer: Carboline Company
2150 Schuetz Road
St. Louis, MO 63146
(800) 848-4645

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less Than	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA-CEIL
ALKYL PHENOL POLYAMINE	TRADE SECRET	50.0	NE	NE	NE	NE
META-XYLENE	108-38-3	15.0	434 Mg/M3	651 Mg/M3	434 Mg/M3	N/E
N-BUTANOL	71-36-3	10.0	20 PPM	50 PPM	100 PPM	150 MGM3
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	5.0	NE	N/E	NE	NE
PARA-XYLENE	106-42-3	5.0	100 PPM	150 PPM	435 MGM3	N/E
ETHYL BENZENE	100-41-4	5.0	100 PPM	125 PPM	435 MGM3	N/E
ORTHO-XYLENE	95-47-6	5.0	434 Mg/M3	651 Mg/M3	434 Mg/M3	N/E
TOLUENE	108-88-3	0.2	20 PPM	N/E	375 MGM3	NE

Section 3 - Hazards Identification

Emergency Overview: Warning! Flammable. Harmful if inhaled. Causes eye and skin irritation. Aspiration may cause lung damage. May cause dizziness and drowsiness. Keep away from heat, sparks, flame. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Do not swallow. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Effects Of Overexposure - Eye Contact: Can cause eye burns.

Effects Of Overexposure - Skin Contact: May be harmful if absorbed through the skin. May cause allergic skin reaction. Can cause skin burns.

Effects Of Overexposure - Inhalation: Harmful if inhaled, may affect the brain or nervous system, causing dizziness, headache, or nausea. May cause nose and throat irritation. May cause lung irritation. May cause allergic respiratory reaction, effects may be permanent.

Effects Of Overexposure - Ingestion: Harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Medical Conditions Prone to Aggravation by Exposure: If sensitized to amines, epoxies, or other chemicals do not use. See a physician if a medical condition exists. If you have a condition that could be aggravated by exposure to dust or organic vapors, see a physician prior to use.

Section 4 - First Aid Measures

First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Launder clothing before reuse. If rash or irritation develops, consult a physician.

First Aid - Inhalation: If inhaled, remove to fresh air. Administer oxygen if necessary. Consult a physician if symptoms persist or exposure was severe.

First Aid - Ingestion: If swallowed do not induce vomiting. Seek immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point, F: 90F (30C)
(Setaflash)

Lower Explosive Limit, %: 1.0
Upper Explosive Limit, %: 11.2

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Flammable Liquid. Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and to wear conductive and non-sparking shoes.

Special Firefighting Procedures: Flammable. Cool fire-exposed containers using water spray.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow exposure controls/personal protection guidelines in Section 8. Contain and soak up residual with an absorbent (clay or sand). Take up absorbant material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section 15 for SARA Title III and CERCLA information.

Section 7 - Handling And Storage

Handling: Do not get in eyes, on skin, or on clothing. Keep container tightly closed when not in use. Wear personal protection equipment. Do not breathe vapors. Wash thoroughly after handling. If pouring or transferring materials, ground all containers and tools. Do not weld, heat, cut or drill on full or empty containers. Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

Storage: Keep away from heat, sparks, open flames and oxidizing agents. Keep containers closed. Store in a cool, dry place with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use explosion-proof ventilation when required to keep below health exposure guidelines and Lower Explosion Limit (LEL).

Respiratory Protection: Use only with ventilation to keep levels below exposure guidelines listed in Section 2. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use. For silica containing coatings in a liquid state, and/or if no exposure limits are established in Section 2 above, supplied air respirators are generally not required.

Skin Protection: Recommend impervious gloves and clothing to avoid skin contact. If material penetrates to skin, change gloves and clothing. The use of protective creams may be beneficial to certain individuals. Protective creams should be applied before exposure.

Eye Protection: Recommend safety glasses with side shields or chemical goggles to avoid eye contact.

Other protective equipment: Eye wash and safety showers should be readily available.

Hygienic Practices: Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and allow hazardous materials to pass through. Check shoes carefully after soaking before reuse.

Section 9 - Physical And Chemical Properties

Boiling Range:	150 F (66 C) - 404 F (207 C)	Vapor Density:	Heavier than Air
Odor:	Slight Amine	Odor Threshold:	N/D
Appearance:	Clear to Amber Liquid	Evaporation Rate:	Slower Than Ether
Solubility in H2O:	N/D		
Freeze Point:	N/D	Specific Gravity:	0.98
Vapor Pressure:	N/D	PH:	N/D
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Heat, sparks and open flames.

Incompatibility: Keep away from strong oxidizing agents, heat and open flames.

Hazardous Decomposition Products: Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N/D

Product LC50: N/D

Chemical Name	CAS Number	LD50	LC50
ALKYL PHENOL POLYAMINE	TRADE SECRET	NOT AVAILABLE	NOT AVAILABLE
META-XYLENE	108-38-3	NOT AVAILABLE	NOT AVAILABLE
N-BUTANOL	71-36-3	2500MG/KG RAT,ORAL	>800PPM/4HRS RAT,INHALATION
TRIS-2,4,6-(DIMETHYLAMINOMETHYL)PHENOL	90-72-2	2169 MG/KG ORAL	NOT AVAILABLE
PARA-XYLENE	106-42-3	NOT AVAILABLE	NOT AVAILABLE
ETHYL BENZENE	100-41-4	3500 MG/KG RAT,ORAL	NOT AVAILABLE
ORTHO-XYLENE	95-47-6	NOT AVAILABLE	NOT AVAILABLE
TOLUENE	108-88-3	5.0 G/KG RAT ORAL, 14G/KG RABBIT DERMAL	8000 PPM/4HRS, RAT, INHALATION

Section 12 - Ecological Information

Ecological Information: No data

Section 13 - Disposal Information

Disposal Information: Dispose of in accordance with State, Local, and Federal Environmental regulations. Responsibility for proper waste disposal is with the owner of the waste.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Paint	Packing Group: III
DOT Technical Name:	N/A	Hazard Subclass: N/A
DOT Hazard Class:	3	Resp. Guide 128
		Page:
DOT UN/NA Number:	UN 1263	

Additional Notes: None.

Section 15 - Regulatory Information

CERCLA - SARA HAZARD CATEGORY

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS Number</u>
META-XYLENE	108-38-3
N-BUTANOL	71-36-3
PARA-XYLENE	106-42-3
ETHYL BENZENE	100-41-4
ORTHO-XYLENE	95-47-6
TOLUENE	108-88-3

TOXIC SUBSTANCES CONTROL ACT

All components of this product are listed on the TSCA inventory.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Chemical Name</u>	<u>CAS Number</u>
PARA-XYLENE	106-42-3

U.S. STATE REGULATIONS AS FOLLOWS:

NEW JERSEY RIGHT-TO-KNOW

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS Number</u>
POLYAMINE	TRADE SECRET

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS Number</u>
POLYAMINE	TRADE SECRET

CALIFORNIA PROPOSITION 65

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS Number</u>
ETHYL BENZENE	100-41-4

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards:

<u>Chemical Name</u>	<u>CAS Number</u>
TOLUENE	108-88-3

INTERNATIONAL REGULATIONS AS FOLLOWS:

CANADIAN WHMIS

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B2 D2A D2B

Section 16 - Other Information

HMIS Ratings**Health: 3****Flammability: 3****Reactivity: 0****Personal Protection: X****VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 172****REASON FOR REVISION:** New Product**Legend:** N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations

**Safety Data Sheet****Prepared in Accordance with HCS 29
C.F.R. 1910.1200****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 0859A1NL **Revision Date:** 12/05/2022
Product Name: CARBOTHANE 134 **Supersedes Date:** 02/15/2022
HG PART A
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
2150 Schuetz Road
St. Louis, MO USA 63146
- Regulatory / Technical Information:
Contact Carboline Technical Services at
1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - regulatory@carboline.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification**2.1 Classification of the substance or mixture**

Carcinogenicity, category 1A
Eye Irritation, category 2
Flammable Liquid, category 2
Germ Cell Mutagenicity, category 1A
Reproductive Toxicity, category 2
STOT, repeated exposure, category 1
STOT, single exposure, category 3, NE
Skin Irritation, category 2

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

TOLUENE, N-BUTYL ACETATE, MICROCRYSTALLINE SILICA

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Germ Cell Mutagenicity, category 1A	H340-1A	May cause genetic defects.
Carcinogenicity, category 1A	H350-1A	May cause cancer.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.

PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P235	Keep cool.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention
P314	Get medical advice/attention if you feel unwell.
P332+313	If skin irritation occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

Name According to EEC	EINEC No.	CAS-No.	%	Classifications

TITANIUM DIOXIDE	236-675-5	13463-67-7	25 - <50		
MICROCRYSTALLINE SILICA	238-878-4	14808-60-7	25 - <50	H350-372	Carc. 1A, STOT RE 1
BISMUTH VANDATE	237-898-0	14059-33-7	10 - <25		
N-BUTYL ACETATE	204-658-1	123-86-4	10 - <25	H226-336	Flam. Liq. 3, STOT SE 3 NE
TOLUENE	203-625-9	108-88-3	2.5 - <10	H225-304-315-319-332-335-336-361-370-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Eye Irrit. 2, Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 1, STOT SE 3 NE, STOT SE 3 RTI
CARBON BLACK	215-609-9	1333-86-4	2.5 - <10		
META-XYLENE	203-576-3	108-38-3	2.5 - <10	H312-315-332	
ALIPHATIC DIOL	203-489-0	PROPRIETARY	2.5 - <10	H315-319	Eye Irrit. 2, Skin Irrit. 2
LIMESTONE	215-279-6	1317-65-3	2.5 - <10	H315-319	Eye Irrit. 2, Skin Irrit. 2
BENZENESULFONIC ACID, 4-c10-13-SEC-ALKYL DERIVS CPD W 2-PROPANAMINE		84961-74-0	1.0 - <2.5	H315-319-412	Aquatic Chronic 3, Eye Irrit. 2, Skin Irrit. 2
ETHYL BENZENE	202-849-4	100-41-4	1.0 - <2.5	H225-304-315-319-332-351-373-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Carc. 2, Eye Irrit. 2, Flam. Liq. 2, Skin Irrit. 2, STOT RE 2
PARA-XYLENE	203-396-5	106-42-3	1.0 - <2.5	H304-312-315-332-335-371	
AMORPHOUS SILICA	231-545-4	7631-86-9	1.0 - <2.5	H335-372	STOT RE 1, STOT SE 3 RTI
1-METHOXY-2-PROPANOL ACETATE	203-603-9	108-65-6	1.0 - <2.5	H226	Flam. Liq. 3
ORTHO-XYLENE	202-422-2	95-47-6	1.0 - <2.5	H312-315-332	

CAS-No.**M-Factors**

13463-67-7
 14808-60-7
 14059-33-7
 123-86-4
 108-88-3
 1333-86-4
 108-38-3
 PROPRIETARY
 1317-65-3
 84961-74-0
 100-41-4
 106-42-3
 7631-86-9
 108-65-6
 95-47-6

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Remarks: CAS No 13463-67-7: Note 10

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

No Information

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
TITANIUM DIOXIDE	13463-67-7	10 mg/m3	N/E	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.025 MGM3	N/E	N/E
BISMUTH VANDATE	14059-33-7	N/E	N/E	N/E
N-BUTYL ACETATE	123-86-4	50 PPM	150 PPM	N/E
TOLUENE	108-88-3	20 PPM	N/E	N/E
CARBON BLACK	1333-86-4	3 MGM3	N/E	N/E
META-XYLENE	108-38-3	100 PPM	150 PPM	N/E
ALIPHATIC DIOL	PROPRIETARY	25 PPM	50 PPM	N/E
LIMESTONE	1317-65-3	N/E	N/E	N/E
BENZENESULFONIC ACID, 4-c10-13-SEC-ALKYL DERIVS CPD W 2-PROPANAMINE	84961-74-0	N/E	N/E	N/E
ETHYL BENZENE	100-41-4	20 PPM	125 ppm	
PARA-XYLENE	106-42-3	100 PPM	150 PPM	N/E
AMORPHOUS SILICA	7631-86-9	10.0 MG/M3	N/E	N/E
1-METHOXY-2-PROPANOL ACETATE	108-65-6	N/E	N/E	N/E
ORTHO-XYLENE	95-47-6	100 PPM	150 PPM	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
TITANIUM DIOXIDE	13463-67-7	15 MGM3	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.05 MGM3	N/E

BISMUTH VANDATE	14059-33-7	N/E	N/E
N-BUTYL ACETATE	123-86-4	710 MGM3, 150 PPM	560 MGM3, 200 PPM
TOLUENE	108-88-3	200 ppm	560 MGM3, 150 PPM
CARBON BLACK	1333-86-4	3.5 MGM3	N/E
META-XYLENE	108-38-3	100.00 PPM	N/E
ALIPHATIC DIOL	PROPRIETARY	N/E	N/E
LIMESTONE	1317-65-3	5 MGM3 15 MGM3 5 MGM3 15 MGM3 5 MGM3 15 MGM3	N/E
BENZENESULFONIC ACID, 4-c10-13-SEC-ALKYL DERIVS CPD W 2-PROPANAMINE	84961-74-0		N/E
ETHYL BENZENE	100-41-4	435 MGM3, 100 PPM	545 MGM3, 125 PPM
PARA-XYLENE	106-42-3	100.00 PPM	N/E
AMORPHOUS SILICA	7631-86-9	15.0 mg/m3	N/E
1-METHOXY-2-PROPANOL ACETATE	108-65-6	N/E	N/E
ORTHO-XYLENE	95-47-6	100.00 PPM	N/E

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Viscous Liquid, Various Colors

Physical State Liquid

Odor	Solvent
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	232F (111C) - 284 F (140 C)
Flash Point (°C)	50F (10C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.6 - 10.4
Vapour Pressure, mmHg	N/D
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	N/D
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	264
Specific Gravity (g/cm ³)	app. 1.28

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Eye Irritation and Skin Irritation, category 2

Corrosivity: Unknown

Sensitization: Unknown

Repeated dose toxicity: STOT Repeated Dose (lungs): Category 1

Carcinogenicity: Carcinogenicity, category 1A

Mutagenicity: Unknown

Toxicity for reproduction: Reproductive Toxicity, category 2

STOT-single exposure: Unknown

STOT-repeated exposure: STOT, repeated exposure, category 1

Aspiration hazard: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	Not Available	Not Available	No Information	No Information
14808-60-7	MICROCRYSTALLINE SILICA	22500 mg/kg	Not Available	Not Available	0.000	0.000
14059-33-7	BISMUTH VANDATE	>5000 mg/kg			0.000	0.000
123-86-4	N-BUTYL ACETATE	10760 mg/kg, rat, oral	14112 mg/kg (rabbit)	21 mg/l/4/h, Inh. rat		
108-88-3	TOLUENE	5000 mg/kg rat oral	12267 mg/kg, dermal, rabbit	8000 ppm/4 hrs, rat, inhalation	0.000	0.000
1333-86-4	CARBON BLACK	8000 mg/kg oral, rat	Not Available	Not Available		
108-38-3	META-XYLENE	Not Available	Not Available	Not Available	0.000	0.000
PROPRIETARY	ALIPHATIC DIOL	Not Available		Not Available	0.000	0.000
1317-65-3	LIMESTONE	Not Available	Not Available	5,000 mg/kg, rat, oral	0.000	0.000
84961-74-0	BENZENESULFONIC ACID, 4-c10-13-SEC-ALKYL DERIVS CPD W 2-PROPANAMINE	Not Available	Not Available	Not Available	No Information	No Information

100-41-4	ETHYL BENZENE	3500 mg/kg rat, oral	>5000 mg/l, dermal rabbit	17.2 mg/L Inh, Rat, 4Hr	0.000	0.000
106-42-3	PARA-XYLENE	Not Available	Not Available	Not Available	0.000	0.000
108-65-6	1-METHOXY-2-PROPANOL ACETATE	8532 mg/kg, oral (rat)	>5000 mg/kg	101 ppm/4 hr, rat, inh	0.000	0.000
95-47-6	ORTHO-XYLENE	Not Available	Not Available	Not Available	0.000	0.000

Additional Information:

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group 1 carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Constituents may also include abestiform or non-asbestiform tremolite or other silicates as impurities, and above the minimum exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	Unknown
IC50 72hr (Algae):	Unknown
LC50 96hr (fish):	Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
14808-60-7	MICROCRYSTALLINE SILICA	No information	No information	No information
14059-33-7	BISMUTH VANDATE	No information	No information	No information
123-86-4	N-BUTYL ACETATE	44 mg/l (Daphnia magna)	674.7 mg/L (Green Algae)	18 mg/l (Fathead minnow)
108-88-3	TOLUENE	6 mg/l (Daphnia magna)	12.5 mg/L (Algae)	5.8 mg/L (Fish)
1333-86-4	CARBON BLACK	No information	No information	No information
108-38-3	META-XYLENE	No information	No information	No information
PROPRIETARY	ALIPHATIC DIOL	No information	No information	No information
1317-65-3	LIMESTONE	1,000 mg/l	200 mg/l	10,000 mg/l
84961-74-0	BENZENESULFONIC ACID, 4-c10-13-SEC-ALKYL DERIVS CPD W 2-PROPANAMINE	No information	No information	No information
100-41-4	ETHYL BENZENE	1.8 mg/l (Daphnia Magna)	4.6 mg/l (Green Algae)	4.2 mg/l (Rainbow Trout)

106-42-3	PARA-XYLENE	No information	No information	No information
7631-86-9	AMORPHOUS SILICA	No information	10000 mg/l (Algae)	10000 mg/l (Zebra fish)
108-65-6	1-METHOXY-2-PROPANOL ACETATE	408 mg/l (Daphnia Magna)	>1000 mg/l (Green Algae)	161 mg/l (Fathead Minnow)
95-47-6	ORTHO-XYLENE	No information	No information	No information

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1	UN number	UN 1263
14.2	UN proper shipping name	Paint
	Technical name	N/A
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	N/A
14.4	Packing group	II
14.5	Environmental hazards	Unknown
14.6	Special precautions for user	Unknown
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Reproductive toxicity, Skin Corrosion or Irritation, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure), Germ cell mutagenicity

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>%</u>
TOLUENE	108-88-3	9.31
META-XYLENE	108-38-3	3.21
ETHYL BENZENE	100-41-4	1.49
PARA-XYLENE	106-42-3	1.42
ORTHO-XYLENE	95-47-6	1.05

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name**CAS-No.**

ACRYLIC COPOLYMER

TRADE SECRET

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name**CAS-No.**

ACRYLIC COPOLYMER

TRADE SECRET

COLOR PIGMENT

5567-15-7

YELLOW PIGMENT

31837-42-0

YELLOW IRON OXIDE

51274-00-1

IRON OXIDE

1309-37-1

AZO PIGMENT

82199-12-0

ACRYLIC POLYOL

TRADE SECRET

AZO PIGMENT

2786-76-7

RED PIGMENT

84632-65-5

COLOR PIGMENT

15793-73-4

QUINACRIDONE PIGMENT

1047-16-1

COLOR PIGMENT

1328-53-6

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory (DSL)

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

SAFETY DATA SHEET

1. Identification

Product identifier	CIMSTAR® 10-570-HFP METALWORKING FLUID
Other means of identification	
SDS number	Not applicable
Recommended use	METALWORKING FLUID
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	

Company name CIMCOOL® Industrial Products LLC
3000 Disney Street
Cincinnati, Ohio 45209

Telephone (General Information) 513-458-8100
Emergency telephone number 1-800-424-9300 (CHEMTREC)
Emergency telephone number (outside USA) 1-703-527-3887 (CHEMTREC)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin irritation	Category 2
	Serious eye irritation	Category 2
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word Warning
Hazard statement Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear eye protection/face protection. Wear protective gloves.
Response If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information 1.12% of the mixture consists of component(s) of unknown acute oral toxicity. 3.63% of the mixture consists of component(s) of unknown acute dermal toxicity.

The classified hazards shown on this SDS are associated with the product concentrate. These hazards are not expected under recommended use conditions and dilution.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES		64742-52-5	20 - 30
AMINOMETHYLPROPANOL		124-68-5	1 - 3
HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S- TRIAZINE		4719-04-4	1 - 3
MONOETHANOLAMINE		141-43-5	<= 1
Other components below reportable levels			60 - 70

The exact percentages of hazardous ingredients have been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth thoroughly. Do not give liquids. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Local authorities should be advised if significant spillages cannot be contained. This product is miscible in water. Clean up in accordance with all applicable regulations.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage**Precautions for safe handling**

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection**Occupational exposure limits****U.S. - OSHA**

	Type	Value
SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES (CAS 64742-52-5)	PEL	5 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	PEL	6 mg/m ³ 3 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m ³ 6 ppm
	TWA	8 mg/m ³ 3 ppm

ACGIH

	Type	Value
SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES (CAS 64742-52-5)	TWA	5 mg/m ³

US. ACGIH Threshold Limit Values

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended.
Skin protection	
Hand protection	Use protective gloves made of: Nitrile.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Chemical
Odor threshold	Not available.
pH	9.3
Melting point/freezing point	< 30 °F (< -1.1 °C)
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	Not Applicable
Evaporation rate	Like water when diluted
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	100 % Water Miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	8.7 @ 5%
Specific gravity	1.011
VOC ASTM D2369	12 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Hazardous decomposition products	Smoke, fumes, oxides of nitrogen, and oxides of carbon

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not classified.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes eye irritation.
Ingestion	Not classified.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
AMINOMETHYLPROPANOL (CAS 124-68-5)		
<u>Acute</u>		
Dermal		
<i>Liquid</i>		
LD50	Rabbit	> 2000 mg/kg
Oral		
<i>Liquid</i>		
LD50	Rat	2900 mg/kg
MONOETHANOLAMINE (CAS 141-43-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	1025 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard	Not an aspiration hazard.
Chronic effects	Not classified.
Further information	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species		Test Results
AMINOMETHYLPROPANOL (CAS 124-68-5)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia	193 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	190 mg/l, 96 hours
MONOETHANOLAMINE (CAS 141-43-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)	
MONOETHANOLAMINE	-1.31

Mobility in soil This product is miscible in water.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S-
TRIAZINE (CAS 4719-04-4)

1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

Food and Drug Administration (FDA)	Not regulated.

US state regulations**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

NITRILOTRIACETIC ACID (CAS 139-13-9)

Listed: January 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES (CAS 64742-52-5)

California South Coast Air Quality Management District (SCAQMD) Rule 1144 (VOC Emissions)	This product is subject to SCAQMD Rule 1144; it is compliant and may be sold and used in the SCAQMD. The VOC content of the product is 56 g/L, measured by ASTM Method E-1868-10. This product has a specified use dilution VOC limit of 75 g/L, the maximum dilution concentration is 100 % to maintain compliance.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Issue date	10-24-2017
Revision date	10-26-2017
Version #	02
Further information	Not available.
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Product and Company Identification: Cimcool Lab Notebook Code Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Odor



SAFETY DATA SHEET

Cut-N-Cool

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Cut-N-Cool

Product number L0514-057, L0514-060, L0514-062

Recommended use of the chemical and restrictions on use

Application Lubricating oil

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Manufacturer Lubriplate Lubricants Co.
Corporate Headquarters
129 Lockwood Street
Newark, NJ 07105

Midwest Office & Plant
1500 Oakdale Ave.
Toledo, OH 43605
419-691-2491
419-693-3806

Emergency telephone number

Emergency telephone Chem-Tel: 1-800-255-3924 (US & Canada only)
01-813-248-0585 (Outside US & Canada)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Eye Irrit. 2B - H320

Environmental hazards Not Classified

Label elements

Signal word Warning

Hazard statements H320 Causes eye irritation.

Precautionary statements P264 Wash contaminated skin thoroughly after handling.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/ attention.

Other hazards

This product does not contain any substances classified as PBT or vPvB.

Cut-N-Cool

3. Composition/information on ingredients

Mixtures

Distillates (petroleum), hydrotreated heavy naphthenic CAS number: 64742-52-5	30-60%
Classification Not Classified	
Triethanolamine CAS number: 102-71-6	5-10%
Classification Not Classified	
Dipropylene glycol methyl ether CAS number: 34590-94-8	1-5%
Classification Not Classified	
2-aminoethanol CAS number: 141-43-5	<1%
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	

The full text for all hazard statements is displayed in Section 16.

Composition comments * The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

4. First-aid measures

Description of first aid measures

General information	If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.
Inhalation	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.
Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.
Skin Contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.

Cut-N-Cool

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders Use protective equipment appropriate for surrounding materials.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation No specific symptoms known. Spray/mists may cause respiratory tract irritation.

Ingestion No specific symptoms known. May cause discomfort if swallowed.

Skin contact No specific symptoms known. May cause discomfort.

Eye contact No specific symptoms known. May be slightly irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

Specific treatments No special treatment required.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No specific recommendations. For personal protection, see Section 8.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

Cut-N-Cool

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class Unspecified storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Distillates (petroleum), hydrotreated heavy naphthenic

Mineral oil, excluding metal working fluids (pure, highly and severely refined)
ACGIH

Triethanolamine

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³

Dipropylene glycol methyl ether

Long-term exposure limit (8-hour TWA): ACGIH 100 ppm 606 mg/m³

Short-term exposure limit (15-minute): ACGIH 150 ppm 909 mg/m³

Sk

Long-term exposure limit (8-hour TWA): OSHA 100 ppm 600 mg/m³

Sk

2-aminoethanol

Long-term exposure limit (8-hour TWA): OSHA 3 ppm 6 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 3 ppm 7.5 mg/m³

Short-term exposure limit (15-minute): ACGIH 6 ppm 15 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

Sk = Danger of cutaneous absorption.

Dipropylene glycol methyl ether (CAS: 34590-94-8)

Immediate danger to life and health 600 ppm

2-aminoethanol (CAS: 141-43-5)

Immediate danger to life and health 30 ppm

Exposure controls

Cut-N-Cool

Protective equipment



Appropriate engineering controls	No specific ventilation requirements.
Eye/face protection	No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.
Hand protection	No specific hand protection recommended. Large Spillages: Wear protective gloves.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Brown.
Odor	Mild.
Odor threshold	Not available.
pH	pH (concentrated solution): 9.3
Melting point	0°C/32°F
Initial boiling point and range	121°C/249.8°F
Flash point	160°C/320°F Cleveland open cup.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.98
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	170-190 cSt @ 40°C/104°F

Cut-N-Cool

Explosive properties	Not considered to be explosive.
Oxidizing properties	Does not meet the criteria for classification as oxidizing.
Other information	None.

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitization</u>	
Respiratory sensitization	Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	

Cut-N-Cool

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation No specific symptoms known. Spray/mists may cause respiratory tract irritation.

Ingestion No specific symptoms known. May cause discomfort if swallowed.

Skin Contact No specific symptoms known. May cause discomfort.

Eye contact No specific symptoms known. May be slightly irritating to eyes.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target Organs No specific target organs known.

Toxicological information on ingredients.

2-aminoethanol

Acute toxicity - oral

Notes (oral LD₅₀) Acute Tox. 4 - H302 Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Acute Tox. 4 - H312 Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Acute Tox. 4 - H332 Harmful if inhaled.

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Animal data Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

Cut-N-Cool

Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	STOT SE 3 - H335 May cause respiratory irritation.
Target organs	Respiratory system, lungs
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>General information</u>	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Corrosive to the respiratory tract. Symptoms following overexposure may include the following: Severe irritation of nose and throat.
Ingestion	May cause chemical burns in mouth, esophagus and stomach. Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.
Skin Contact	Causes severe burns. Symptoms following overexposure may include the following: Pain or irritation. Redness. Blistering may occur.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	Respiratory system, lungs

12. Ecological information

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
Toxicity	Based on available data the classification criteria are not met.
<u>Persistence and degradability</u>	
Persistence and degradability	The degradability of the product is not known.
<u>Bioaccumulative potential</u>	

Cut-N-Cool

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not available.

Mobility in soil

Mobility No data available.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number

UN No. (International) Not applicable.

UN No. (DOT) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Proper shipping name (DOT) Not applicable.

Transport hazard class(es)

Transport Labels (International) No transport warning sign required.

DOT transport labels

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

DOT packing group Not applicable.

Environmental hazards

Environmentally Hazardous Substance
No.

Special precautions for user

Not applicable.

Cut-N-Cool

DOT reportable quantity Not applicable.

DOT TIH Zone Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Dipropylene glycol methyl ether

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

2-aminoethanol

Dipropylene glycol methyl ether

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Cut-N-Cool

Triethanolamine

2-aminoethanol

Dipropylene glycol methyl ether

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Triethanolamine

2-aminoethanol

Dipropylene glycol methyl ether

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Triethanolamine

2-aminoethanol

Dipropylene glycol methyl ether

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Triethanolamine

2-aminoethanol

Dipropylene glycol methyl ether

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Triethanolamine

2-aminoethanol

Dipropylene glycol methyl ether

Inventories

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Classification abbreviations and acronyms Eye Irrit. = Eye irritation

Training advice Only trained personnel should use this material.

Revision date 8/16/2018

SDS No. 5028

Cut-N-Cool

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H320 Causes eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

End of SDS

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Conforms to Hazard Communication Standard 29 CFR 1910.1200

Section 1 - IDENTIFICATION

Product Identifier: Cutter All Family Insect Repellent⁴

Other Means of Identification:

Product Code	HG-97203
Formula Number	21-1735
EPA Reg. Number	70759-4-121

Recommended Use: Insect repellent - aerosol

Recommended Restrictions: Use in accordance with label directions

Manufacturer/Importer/Supplier/Distributor Information:

Company Name	Spectrum, A Division of United Industries
Address	PO Box 142642, St. Louis, MO 63114-0642
Telephone Number	1-800-767-9927

Emergency Telephone Number:

CHEMTREC	(800)424-9300
Medical	1-800-767-9927

Section 2 - HAZARD(S) IDENTIFICATION

Classification of Substance or Mixture:

Physical Hazard(s)	Flammable Aerosol - Category 2 Gases Under Pressure - Liquefied Gas
Health Hazard(s)	Eye Irritant Category 2A

Label Elements:

Hazard Pictogram(s)



Signal Word

Warning

Hazard Statements:

Flammable aerosol
Contains gas under pressure; may explode if heated
Causes serious eye irritation

Precautionary Statements:

Keep away from heat, sparks, open flames, and hot surfaces. - No smoking. Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.
Wash hands thoroughly after handling. Wear eye protection.
If in eyes: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Hazard(s) not Otherwise Classified (HNOC): No additional information available**Supplemental Information:** None

Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Synonyms	CAS Number	%
3-[N-n-butyl-N-acetyl] aminoproponic acid ethylester	IR3535	52304-36-3	20.00
Ethanol	n/a	64-17-5	21.70
Isobutane	n/a	75-28-5	35.00
Butane	n/a	106-97-8	3.50

In accordance with paragraph (d) of 1910.1200, the exact percentage (concentration) has been withheld as a trade secret. Other components are below reportable levels.

Section 4 - FIRST-AID MEASURES

Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin Contact:	In case of contact, wash skin with plenty of water. If skin irritation or redness develops, seek medical attention.
Eye Contact:	In case of contact, flush eyes with plenty of water for several minutes. Remove contact lenses, if worn. If irritation persists, get medical attention.
Ingestion:	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.
Most Important Symptoms/Effects, Acute and Delayed:	Symptoms of exposure may include, irritation of eyes and nose, cough and/or shortness of breath.
Indication of Immediate Medical Attention & Special Treatment Needed:	Seek medical attention if eye irritation persists.

Section 5 - FIRE-FIGHTING MEASURES

UN1950**Emergency Response Guide 126****Suitable Extinguishing Media:** Dry chemical or CO₂.**Unsuitable Extinguishing Media:** None: Use extinguishing agent suitable for type of surrounding fire.**Specific Hazards Arising from the Chemical:** Products of combustion may include, and are not limited to: oxides of carbon.

Special Protective Equipment and Precautions for Firefighters: Keep upwind of fire. Vapors may cause dizziness or asphyxiation without warning. Vapors from liquefied gas are initially heavier than air and spread along ground. Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. Fire may produce irritating, corrosive and/or toxic gases. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the

In Case of Large Fire: manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing will only provide limited protection. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.

Potential Hazards: Some may burn but none ignite readily. Containers may explode when heated. Ruptured cylinders may rocket.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Methods and Materials for Containment and Cleaning Up: Do not touch or walk through spilled material. Stop leak if you can do it without risk. Do not direct water at spill or source of leak. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. If possible, turn leaking containers so that gas escapes rather than liquid. Prevent entry into waterways, sewers, basements or confined areas. Allow substance to evaporate. Ventilate the area.

Environmental Precautions: Report spills as required by local and national regulations. Prevent entry into storm sewers and waterways.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling: Avoid breathing mist. Avoid contact with skin and eyes. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Conditions for Safe Storage, Including any Incompatibilities: Keep out of reach of children. Keep container tightly closed. (See section 10).

NFPA 30B Classification: Level 2 Aerosol

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Chemical Name	Exposure Limit					
	OSHA PEL		ACGIH TLV		Supplier OEEL	
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethanol	TWA 1000	TWA 1900	STEL 1000	-	-	-
Isobutane	-	-	STEL 1000	-	-	-
Butane	-	-	STEL 1000	-	-	-

Appropriate Engineering Controls: General ventilation should be adequate for all normal use.

Individual Protective Measures, Such as Personal Protective Equipment:

Eye/face protection: None required for normal use. Avoid eye contact.

Skin and body protection: None required under normal use conditions.

Respiratory protection: None required under normal use conditions.

General hygiene considerations: Do not eat, drink or smoke where material is handled, processed or stored. Wash hands after handling.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.):	Clear, colorless liquid
Odor:	Weak ethanolic
Odor Threshold:	No data available
pH:	4.8
Melting / Freezing Point:	No data available
Initial boiling point and range:	No data available
Flashpoint:	83.7°F (28.7°C)
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	0.949 g/cm ³
Solubility(ies):	Not determined
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, dynamic:	5.13 mPAS
Heat of Combustion:	29.1099 kJ/g

Section 10 - STABILITY AND REACTIVITY

Reactivity:	Vapors may form explosive mixture with air.
Chemical stability:	Stable under normal storage conditions.
Possibility of hazardous reactions:	Risk of explosion with Strong Oxidizing agents Nickel Carbonyl
Conditions to avoid:	Heat. Incompatible materials.
Incompatible materials:	None known.
Hazardous decomposition products:	May include, and are not limited to oxides of carbon. In the event of fire, see section 5.

Section 11 - TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhalation, Ingestion and/or skin or eye contact

Symptoms related to the physical, chemical and toxicological characteristics:

Inhalation:	May cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Skin contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Eye contact: Causes serious eye irritation

Acute Toxicity Values:

Calculated overall Chemical Acute Toxicity Values (ATE)		
LD50 (Oral)	LD50 (Dermal)	LC50 (inhalation)
>2000 mg/kg	>2000 mg/kg	>5mg/l

Eye Contact: Causes serious eye irritation

Skin Contact: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

Chronic Effects-Carcinogenicity:

Ingredient	Chemical Listed as a Carcinogen or Potential Carcinogen (NTP, IARC, OSHA)
None of the ingredients present in this product at or above 0.1% are listed as potential carcinogens on the NTP, IARC or OSHA lists.	

Reproductive Toxicity: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Comment: All information was generated using the GHS classification criteria for mixtures and test data where available.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity: This product is not expected to be harmful to aquatic organisms.

Persistence and degradability: No data available

Bioaccumulative potential: Not Expected

Mobility in soil: No data available

Other adverse effects: No data available

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with all local, state/provincial and federal regulations. For more information see product label.

Section 14 - TRANSPORTATION INFORMATION

DOT:

UN Number:	UN1950
Proper Shipping Name:	Aerosols
Hazard Class:	2.1
Packing Group:	None
Limited Quantity:	≤1L

IATA: UN Number: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Packing Group: None

IMDG: UN Number: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Packing Group: None
Limited Quantity: ≤1L
Marine Pollutant: No

Section 15 - REGULATORY INFORMATION

US EPA Label Information:

EPA Pesticide Registration Number 70759-4-305

Federal Insecticide, Fungicide, Rodenticide Act Regulations

This chemical is a pesticide product registered by the Environmental Protection Agency and is subjected to certain labeling requirements under the federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

WARNING: KEEP OUT OF REACH OF CHILDREN.

Hazards to Humans

WARNING. For external use only. Causes substantial but temporary eye injury. Do not get in eyes. Do not spray on face. Do not rub eyes with product or with fabric that has contacted product or treated skin. Discontinue use and consult a doctor if irritation or rash occurs.

FIRST AID: • If in Eyes: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a Poison Control Center or doctor for treatment advice. • Have the product container or label with you when calling a Poison Control Center or doctor, or going for treatment. • For information on this pesticide product, call 1-888-880-1181.

Storage: Store in cool, dry place, away from heat or flame

Disposal: If Empty: Nonrefillable Container. Do not reuse or refill this container. Place in trash or offer for recycling if available. If Partly Filled: Call your local solid waste agency or call 1-888-880-1181 for disposal instructions. Never place unused product down any indoor or outdoor drain.

EPA TSCA Inventory: All of the components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

SARA Hazard Category (311/312): See OSHA hazards listed in section 2.

Disclaimer:

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Section 16 - OTHER INFORMATION

Issue date: February 23, 2023
Revision date: October 23, 2023
Version number: 2.0



SAFETY DATA SHEET

1. Identification

Product identifier Cutting Oil Thread Cutting Lubricant - 1 gal

Other means of identification

Product Code No. 14051 (Item# 1004786)

Recommended use Cutting oil

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc.

Address 885 Louis Dr.
Warminster, PA 18974 US

Telephone

General Information 215-674-4300

Technical Assistance 800-521-3168

Customer Service 800-272-4620

24-Hour Emergency 800-424-9300 (US)

(CHEMTREC)

Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	80 - 90
paraffin oils (petroleum), catalytic dewaxed heavy		64742-70-7	5 - 10
paraffin oils (petroleum), catalytic dewaxed light		64742-71-8	3 - 7

Chemical name	Common name and synonyms	CAS number	%
distillates (petroleum), hydrotreated heavy paraffinic		64742-54-7	1 - 5
sodium sulfate		7757-82-6	1 - 5
distillates (petroleum), hydrotreated light paraffinic		64742-55-8	≤ 1
distillates (petroleum), solvent-dewaxed heavy paraffinic		64742-65-0	≤ 1
distillates (petroleum), solvent-dewaxed light paraffinic		64742-56-9	≤ 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	PEL	5 mg/m3	Mist.
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)	PEL	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	PEL	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	PEL	5 mg/m3	Mist.

ACGIH

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)	TWA	5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	TWA	5 mg/m3	Inhalable fraction.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	TWA	5 mg/m3	Inhalable fraction.

U.S. - NIOSH

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	STEL	10 mg/m3	Mist
	TWA	5 mg/m3	Mist

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Nitrile. Neoprene.

Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Brown.
Odor	Mild petroleum.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	500 °F (260 °C) estimated
Flash point	365.0 °F (185.0 °C) Pensky-Martens Closed Cup
Evaporation rate	Slow.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.6 % estimated
Flammability limit - upper (%)	Not available.
Vapor pressure	0.1 hPa estimated
Vapor density	> 5 (air = 1)
Relative density	0.92
Solubility(ies)	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Percent volatile	90.4 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Sulfur oxides. Mercaptans. Sulfides. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.

Skin contact	Based on available data, the classification criteria are not met.	
Eye contact	Based on available data, the classification criteria are not met.	
Ingestion	Based on available data, the classification criteria are not met.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.	
Information on toxicological effects		
Acute toxicity	Not known.	
Components	Species	Test Results
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)	3	Not classifiable as to carcinogenicity to humans.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	3	Not classifiable as to carcinogenicity to humans.
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)	3	Not classifiable as to carcinogenicity to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	

Chronic effects	Prolonged inhalation may be harmful.
Further information	This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
SARA 304 Emergency release notification	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.
CERCLA Hazardous Substances: Reportable quantity	Not listed.
	Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.
Other federal regulations	
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.
Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
SARA 302 Extremely hazardous substance	Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Massachusetts RTK - Substance List

distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)
sodium sulfate (CAS 7757-82-6)

US. Pennsylvania Worker and Community Right-to-Know Law

distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)
sodium sulfate (CAS 7757-82-6)

US. Rhode Island RTK

distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)
distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)
distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)
distillates (petroleum), solvent-dewaxed light paraffinic (CAS 64742-56-9)
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)
paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 100 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as a Cutting or Tapping Oil (non-aerosol). This product is compliant for use in all 50 states.

*Local restriction: This product cannot be used in the South Coast Air Quality Management District of California.

VOC content (CA) 0 %

VOC content (OTC) 0 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	09-03-2019
Revision date	11-20-2020
Prepared by	Allison Yoon
Version #	02
Further information	CRC # 573/1002596
Disclaimer	The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..
Revision information	This document has undergone significant changes and should be reviewed in its entirety.



D-100 Developer Spray Can

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: D-100 Developer Spray Can
SDS Number: D-100 SC
Revision Date: 6/14/2022
Product Use: NDT Inspection Developer
Supplier Details: Sherwin Inc.
5530 Borwick Avenue
South Gate, CA 90280
Phone: 562-861-6324
Email: sherwin@sherwininc.com
Internet: www.sherwininc.com

Emergency telephone number:

ChemTel 1-800-255-3924 in U.S.A, Canada, Puerto Rico and US Virgin Islands;
ChemTel +1-813-248-0585 outside U.S.A, Canada, Puerto Rico and US Virgin Islands
ChemTel Brazil: 0-800-591-6042, China: 400-120-0751, India: 000-800-100-4086 and Mexico: 01-800-099-0731

2 HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Aerosols, 1
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Specific target organ toxicity - Single exposure, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H222 - Extremely flammable aerosol
H229 - Pressurized container: may burst if heated
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash ... thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311 - IF exposed or concerned: Call a POISON CENTER/doctor/...
P370 + P378 - In case of fire: Use dry chemical, alcohol resistant foam or dry sand to extinguish.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.



D-100 Developer Spray Can

3

COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Ingredients:	
	%	Chemical Name:
68476-86-8	40-50%	Propane/ Isobutane
67-63-0	40-50%	2-Propanol

4

FIRST AID MEASURES

- Inhalation:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- Skin Contact:** Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Get immediate medical attention.
- Ingestion:** Clean mouth with water. Keep respiratory tract clear.
Do NOT induce vomiting or attempt chemical neutralization. If symptoms persist, call a physician.

5

FIRE FIGHTING MEASURES

- Flash Point:** 12°C (54 °F) 2-propanol
- Flash Point Method:** ASTM D-56
- Autoignition Temp:** 399-425°C-propanol
- Lower Explosive Limit:** 2%(V) 2-propanol
- UEL:** 13%(V) 2-propanol
- Suitable extinguishing agents:** Alcohol resistant foam, dry chemical, carbon dioxide

Unusual Fire or Explosion Hazards: Contents under pressure. Extremely flammable

Special hazards arising from the substance or mixture: Spray can under pressure. Carbon monoxide and carbon dioxide

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit

Unsuitable extinguishing media: High volume water jet

Further information: Do not allow run-off from fire-fighting to enter drains or water courses. Use a water spray to cool fully closed containers.

6

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Environmental precautions: Do not allow to enter storm sewers/ surface or ground water.

Methods and material for containment and cleaning up: Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.
Dispose contaminated material as waste according to item 13.



D-100 Developer Spray Can

Ensure adequate ventilation..Place in a chemical waste container.

7

HANDLING AND STORAGE

Handling Precautions:

Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area or with appropriate respiratory equipment. Do not swallow. When using do not eat, drink or smoke. (See section 8)

Storage Requirements:

Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep containers upright to prevent leakage. Containers may be hazardous when empty since residue liquid may be present

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Provide adequate ventilation for work and storage areas.

Personal Protective Equipment:

Chemical resistant gloves;
Chemical safety glasses;
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits.
Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters;
Impervious clothing.

Exposure Limits:

	USA OSHA TWA/STEL	ACGIH TWA/STEL
67-63-0 Isopropyl alcohol	400 ppm	200/400 ppm

68476-86-8 Propane/butane	TLV(STEL) 1000 ppm	ACGIH

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust)

Total dust 15 mg/m³ Total Dust TLV/TWA 8-hr: 1 mg/m³ (respirable fraction)

2 mg/m³ Respirable Dust.



General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Do not inhale gases / fumes / aerosols.
Wash hands before breaks and at the end of work.
Avoid contact with eyes and skin.



D-100 Developer Spray Can

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Powder dispersed in solvent, powder settles out and solvent evaporates quickly.		
Physical State:	Liquid in a spray can under pressure	Odor:	Alcohol-like, characteristic, 2-Propanol
Spec Grav./Density:	0.78, 2-Propanol	Solubility:	Soluble in water, 2-Propanol
Viscosity:	Kinematic at 37.8 °C (100 °F): 2.7 cSts (ASTM D455), 2-Propanol	Flash Point:	12 °C (54°F) (ASTM D-56), 2-Propanol
Boiling Point:	82-83°C (180-181°F), 2-Propanol	Vapor Density:	<2.1 @ 20 - 25 °C (68 - 77 °F) (Air = 1.0), 2-Propanol
Vapor Pressure:	45.4 mmHg @ 20 °C (68 °F), 2-Propanol	Auto-Ignition Temp:	399-425°C, 2-Propanol
pH:	Not determined	UFL/LFL:	No data available
Evaporation Rate:	Not determined		

10

STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction under normal use.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Elevated temperatures
Materials to Avoid:	Strong Acids; Strong Bases Strong Oxidizing Agents.
Hazardous Decomposition:	Carbon oxides, sulphur oxides
Hazardous Polymerization:	Will not occur.

11

TOXICOLOGICAL INFORMATION

Serious eye damage/irritation

67-63-0:

Result: Causes serious eye irritation

Inhalation

May cause headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effect.

Skin corrosion/irritation

67-63-0:

Species: Rabbit 12,8000 mg/kg

May dry the skin.

Respiratory or skin sensitization Do not breathe dust. Inhalation of dust in high concentration may cause irritation of respiratory system

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen for this intended use by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

STOT - single exposure



D-100 Developer Spray Can

67-63-0: Assessment: The substance is classified as a specific target organ toxicant, single exposure, category 3 with narcotic effects.

12

ECOLOGICAL INFORMATION

Ecotoxicity

This product is not classified as environmentally hazardous.

67-63-0 LC50(fish) >1400mg/l, 96 hrs

Persistence and degradability

67-63-0 No data available.

This product contains powders and the methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

No data available

Mobility

No data available

13

DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations

Empty containers may retain product residue (liquid and/or vapor) and can be dangerous.

14

TRANSPORT INFORMATION

DOT, IATA, IMDG

UN1950, aerosols, flammable, 2.1

15

REGULATORY INFORMATION

TSCA All components are on the Inventory list

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

SARA 311/312 Hazard classes

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.



D-100 Developer Spray Can

SARA 313 (TRI reporting)

67-63-0 2-Propanol

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

16

OTHER INFORMATION

NFPA: Health = 2, Fire = 4, Reactivity = 0, Specific Hazard = n/a



This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Author: Sherwin Inc.

Publication Date: June 14, 2022

Revision No. 0

Revision Date: 6/14/2022



Safety Data Sheet

24 Hour Emergency Phone Numbers
Medical/Poison Control:
 In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

1. Identification

Product Name:	Concrete Floor Leveler Ready Made	Revision Date:	4/12/2022
Product UPC Number:	070798591844, 070798591905	Supersedes Date:	12/29/2021
Manufacturer:	DAP Global Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non - emergency matters)	Product Use/Class:	Spackling Compound
	SDS Coordinator: MSDS@dap.com	SDS No:	7972901
	Emergency Telephone: Transportation: 1-800-535 -5053 1-352-323-3500 Poison Control: 1-800-222-1222	Preparer:	Regulatory and Environmental Affairs

2. Hazards Identification

EMERGENCY OVERVIEW: Under normal use conditions, this product is not expected to cause adverse health effects. Product dust may be irritating to eyes, skin and respiratory system. Removal of this product after use or by dry sanding will generate dust and exposure to this dust may be irritating to the eyes, ears, nose and mouth.

GHS Classification

Acute Tox. 4 Inhalation, Carc. 1A, STOT RE 1, STOT SE 1

Symbol(s) of Product**Signal Word**

Danger

Possible Hazards

12% of the mixture consists of ingredients of unknown acute toxicity

GHS HAZARD STATEMENTS

Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Carcinogenicity, category 1A	H350	May cause cancer.
STOT, single exposure, category 1	H370	Causes damage to organs . Classified Category 1 Substances that produced significant toxicity in humans and evidence to produce significant toxicity with single exposure. Cell death, adverse change in biochemistry, haematology or urinalysis parameters, Central or peripheral nervous system and effects senses. multifocal or diffuse necrosis, fibrosis or granuloma formation in organs.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/...
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P405	Store locked up.
P501	Dispose of contents/container.

GHS SDS PRECAUTIONARY STATEMENTS

P270	Do no eat, drink or smoke when using this product.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Quartz	14808-60-7	30-60	GHS07-GHS08	H332-350-370-372
Limestone	1317-65-3	3-7	No Information	No Information
Clay	1332-58-7	3-7	No Information	No Information
Titanium dioxide	13463-67-7	0.1-1.0	GHS07-GHS08	H335-351

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist.

FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: No Information

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Spray or Fog, Water

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Ensure fresh air entry during application and drying. Do not breathe dust. Removal of this product after use will result in the generation of Dust. If dry-sanded, exposure to dust may result in the build-up of material in eyes, ears, nose, and mouth which may cause irritation. While dry sanding, use of a NIOSH-approved dust mask is recommended. Wash thoroughly after handling.

STORAGE: Avoid excessive heat and freezing. Do not store at temperatures above 120 °F (49 °C). Store away from caustics and oxidizers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Quartz	0.025 mg/m3 TWA respirable particulate matter	N.E.	50 µg/m3 TWA Respirable crystalline silica	N.E.
Limestone	N.E.	N.E.	15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction	N.E.
Clay	2 mg/m3 TWA particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	N.E.	15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction	N.E.
Titanium dioxide	0.2 mg/m3 TWA nanoscale respirable particulate matter, 2.5 mg/m3 TWA finescale respirable particulate matter	N.E.	15 mg/m3 TWA total dust	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: When concentrations exceed the exposure limits specified, use of a NIOSH-approved dust, mist and fume respirator is recommended. Where the protection factor of the respirator may be exceeded, use of a full facepiece, supplied air, or Self Contained Breathing Apparatus (SCBA) may be necessary. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. Use an approved NIOSH/OSHA respirator if dry sanded. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of

air (0.05 mg/m³) as determined by a full shift sample up to 10-hour work shift. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



SKIN PROTECTION: Wear protective gloves.



EYE PROTECTION: Safety glasses with side-shields.



OTHER PROTECTIVE EQUIPMENT: Not required under normal use.



HYGIENIC PRACTICES: Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance:	Gray	Physical State:	Paste
Odor:	Little or No	Odor Threshold:	Not Established
Density, g/cm³:	1.84 - 1.84	pH:	Between 7.0 and 12.0
Freeze Point, °C:	Not Established	Viscosity (mPa.s):	Not Established
Solubility in Water:	Not Established	Partition Coeff., n-octanol/water:	Not Established
Decomposition Temperature, °C:	Not Established	Explosive Limits, %:	N.E. - N.E.
Boiling Range, °C:	100 - 100	Auto-Ignition Temperature, °C	Not Established
Minimum Flash Point, °C:	100	Vapor Pressure, mmHg:	Not Established
Evaporation Rate:	Slower Than n-Butyl Acetate	Flash Method:	Seta Closed Cup
Vapor Density:	Heavier Than Air	Flammability, NFPA:	Non-Flammable
Combustible Dust:	Does not support combustion		

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Do not breathe dust. Avoid dust formation in confined areas. Excessive heat and freezing.

INCOMPATIBILITY: Incompatible with strong bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Above 1450 degree C: SO₂ and CaO.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Prolonged, repeated, or high exposures may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Dust from dry sanding may cause eye, skin, nose, throat and respiratory tract irritation.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Under normal use conditions, this product is not expected to cause adverse health effects. Prolonged or repeated contact with skin may cause mild irritation.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Under normal use conditions, this product is not expected to cause adverse health effects. Direct eye contact may cause irritation. May cause eye irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Under normal use conditions, this product is not expected to cause adverse health effects. Single dose oral toxicity is very low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury. Ingestion may result in obstruction when material hardens.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: The International Agency for Research on Cancer (IARC) has determined that crystalline silica in the form of quartz or cristobalite that is inhaled from occupational sources is carcinogenic to humans (Group 1-

carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (Group A2). Breathing dust containing respirable crystalline silica may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects: Excessive inhalation of respirable dust can cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with pneumoconiosis are predisposed to develop tuberculosis. There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease. Prolonged or repeated inhalation of dust may cause lung damage. Constituents of this product include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimus exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

PRIMARY ROUTE(S) OF ENTRY: Skin Contact, Inhalation, Eye Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
14808-60-7	Quartz	N.I.	N.I.	N.I.
1317-65-3	Limestone	6450 mg/kg Rat	N.I.	N.I.
1332-58-7	Clay	>5000 mg/kg Rat	>5000 mg/kg Rat	N.I.
13463-67-7	Titanium dioxide	>10000 mg/kg Rat	>5000 mg/kg Rabbit	>20 mg/L

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261. Dispose as hazardous waste according to all local, state, federal and provincial regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.

14. Transport Information

DOT UN/NA Number:	N.A.
DOT Proper Shipping Name:	Not Regulated
DOT Technical Name:	N.A.
DOT Hazard Class:	N.A.
Hazard SubClass:	N.A.
Packing Group:	N.A.

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity, Acute Toxicity (any route of exposure), Specific target organ toxicity (single or repeated exposure)

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

Revision Date: 4/11/2022 Supersedes Date: 12/29/2021

Reason for revision: Substance Hazard Threshold % Changed
Substance and/or Product Properties Changed in Section(s):
01 - Product Information
08 - Exposure Controls/Personal Protection
Substance Regulatory CAS Number Changed
Substance Hazardous Flag Changed

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	Flammability:	Reactivity:	Personal Protection:
2*	0	0	X

VOC Less Water Less Exempt Solvent, g/L: 34.0

VOC Material, g/L: 25

VOC as Defined by California Consumer Product Regulation, Wt/Wt%: 0.81

VOC Actual, Wt/Wt%: 1.4

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H351	Suspected of causing cancer.
H370	Causes damage to organs . Classified Category 1 Substances that produced significant toxicity in humans and evidence to produce significant toxicity with single exposure. Cell death, adverse change in biochemistry, haematology or urinalysis parameters, Central or peripheral nervous system and effects senses. multifocal or diffuse necrosis, fibrosis or granuloma formation in organs.
H372	Causes damage to organs through prolonged or repeated exposure.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.



XIAMETER(R) Material Safety Data Sheet

Page: 1 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Dow Corning Corporation
South Saginaw Road
Midland, Michigan 48686

24 Hour Emergency Telephone: (989) 496-5900

Customer Service: (989) 496-6000

Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No.: 03301079

Revision Date: 2006/01/23

Generic Description: Silicone elastomer

Physical Form: Paste

Color: Colorless

Odor: Acetic acid odor

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Irritates respiratory passages very slightly.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: No known applicable information.

Inhalation: No known applicable information.

Oral: No known applicable information.



XIAMETER(R) Material Safety Data Sheet

Page: 2 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye:	Immediately flush with water for 15 minutes. Get medical attention.
Skin:	Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.
Inhalation:	No first aid should be needed.
Oral:	No first aid should be needed.
Comments:	Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable.
Autoignition Temperature:	Not determined.
Flammability Limits in Air:	Not determined.
Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO ₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards:	None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES



XIAMETER(R) Material Safety Data Sheet

Page: 3 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. Avoid eye contact.

Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
17689-77-9	Ethyltriacetoxysilane	See acetic acid comments.
4253-34-3	Methyltriacetoxysilane	See acetic acid comments.

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves: Silver Shield(R). 4H(R).



XIAMETER(R) Material Safety Data Sheet

Page: 4 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

Inhalation: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: No respiratory protection should be needed.

Precautionary Measures: Avoid eye contact. Use reasonable care.

Comments: Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste
Color: Colorless
Odor: Acetic acid odor
Specific Gravity @ 25°C: 1.04
Viscosity: Not determined.
Freezing/Melting Point: Not determined.
Boiling Point: Not determined.
Vapor Pressure @ 25°C: Not determined.
Vapor Density: Not determined.
Solubility in Water: Not determined.
pH: Not determined.
Volatile Content: Not determined.

Note: The above information is not intended for use in preparing product specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.



XIAMETER(R) Material Safety Data Sheet

Page: 5 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

Call (989) 496-6315, if additional information is required.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)



XIAMETER(R) Material Safety Data Sheet

Page: 6 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>



XIAMETER(R) Material Safety Data Sheet

Page: 7 of 7

Version: 1.3

Revision Date: 2006/01/23

DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 684

7631-86-9 7.0 - 13.0 Silica, amorphous

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous

16. OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

XIAMETER(R) is a trademark of Dow Corning Corporation

<http://www.xiameter.com>

Safety Data Sheet



SECTION 1 IDENTIFICATION

Delo 400 XLE SAE 10W-30

Recommended Use: Heavy Duty Motor Oil

Restrictions on Use: Consult supplier when used other than those specified.

Other means of identification: Delo 400 XLE SAE 10W-30

Product Number(s): 257000, 257011

Company Identification

Chevron Products Company
a division of Chevron U.S.A. Inc.
5001 Executive Parkway
San Ramon, CA 94583
United States of America
www.chevronlubricants.com

Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

Health Emergency

Chevron Emergency & Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information

email : lubemsds@chevron.com

Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION:

Not classified as hazardous according to 29 CFR 1910.1200 (2012).

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Distillates, hydrotreated heavy paraffinic	64742-54-7	50 - 90 %weight
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1	0 - 25 %weight
Highly refined mineral oil (C15 - C50)	Mixture	5 - 15 %weight

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and

flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Most important symptoms and effects, both acute and delayed

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a synthetic hydrocarbon oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS: Not classified

Indication of any immediate medical attention and special treatment needed Not Applicable

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

UNSUITABLE EXTINGUISHING MEDIA: No data available

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Nitrogen.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions and wear appropriate personal protective equipment as indicated in Section 8.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner

consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Keep out of the reach of children.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment (PPE). If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, refer to PPE information below.

Factors that affect PPE include, but are not limited to: properties of the chemical, other chemicals which may contact the same PPE, physical requirements (fit & sizing, cut/puncture protection, dexterity, thermal protection, etc.), and potential allergic reactions to the PPE material. It is the responsibility of the user to read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Skin Protection: Wear chemical personal protective equipment (PPE) to prevent skin contact. Selection of chemical protective clothing should be performed by an Occupational Hygienist or Safety Professional and be based upon applicable standards (ASTM F739 or EN 374). Using chemical PPE depends upon operations conducted and may include chemical gloves, boots, chemical apron, chemical suit, and complete facial protection. **Refer to PPE manufacturers to obtain breakthrough time information to determine how long PPE can be used before it needs to be replaced.** Unless specific glove manufacturer data indicates otherwise, the below table is based upon available industry data to assist in the glove selection process and is intended to be used as reference only.

Chemical Glove Material	Thickness	Typical Breakthrough Time

	(mm)	(minutes)
Butyl	0.7	120
Nitrile	0.8	240
Viton Butyl	0.3	240

Respiratory Protection: A site-specific risk assessment should be conducted by an Occupational Hygienist or a Safety Professional to determine the type and use of respiratory protective equipment. When a site-specific risk assessment determines that respiratory protection is required, use an approved respirator such as:

Air purifying respirator -

If airborne concentration limits exceed the applicable occupational exposure limit, but are below the maximum use concentration.

Vapors only: organic vapor cartridge (filter type A3 per EN 529:2005).

Vapors and particulates (including generated mists): both an organic vapor cartridge & particulate filter (AP3 filter per EN 529:2005).

Refer to respirator manufacturers to obtain service life of cartridge / filter.

Positive pressure air-supplying respirator -

If airborne concentration limits exceed the maximum use concentration offered from an air purifying respirator.

Refer to EN 529:2005, USA OSHA 1910.134, and/or other applicable local/regional/national/international standards for regulatory requirements.

Occupational Exposure Limits:

Component	Agency	Form	TWA	STEL	Ceiling	Notation
Distillates, hydrotreated heavy paraffinic	ACGIH	--	5 mg/m3	10 mg/m3	--	--
Distillates, hydrotreated heavy paraffinic	ACGIH	Inhalable fraction	5 mg/m3	--	--	--
Distillates, hydrotreated heavy paraffinic	OSHA Z-1	--	5 mg/m3	--	--	--
Distillates, hydrotreated heavy paraffinic	OSHA Z-1	Mist	5 mg/m3	--	--	--
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	ACGIH	Inhalable fraction	5 mg/m3	--	--	--
Highly refined mineral oil (C15 - C50)	ACGIH	--	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	--	5 mg/m3	--	--	--

Consult local authorities for appropriate values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Amber

Physical State: Liquid

Odor: Petroleum odor

Odor Threshold: No data available

pH: Not Applicable

Vapor Pressure: No data available

Relative Vapor Density: No data available
Initial Boiling Point: No data available
Solubility: Soluble in hydrocarbons; insoluble in water
Freezing Point: Not Applicable
Melting Point: No data available
Particle Characteristics: Not applicable
Density: 0.868 kg/l @ 15°C (59°F) (Typical)
Kinematic Viscosity: 11.4 mm²/s @ 100°C (212°F) (Minimum)
Coefficient of Therm. Expansion / °F: No data available
Evaporation Rate: No data available
Decomposition temperature: No data available
Partition coefficient n-octanol/water (logarithmic value): No data available

FLAMMABLE PROPERTIES:

Flammability (solid, gas): Not Applicable

Flashpoint: (Cleveland Open Cup) 215 °C (419 °F) (Minimum)

Autoignition: No data available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur. May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Incompatibility With Other Materials: Not applicable

Hazardous Decomposition Products: None known (None expected)

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Serious Eye Damage/Irritation: The material is not considered an eye irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Corrosion/Irritation: The material is not considered a skin irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Sensitization: The material is not considered a skin sensitizer. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The material is not considered a dermal toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The material is not considered an oral toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The material is not considered an inhalation toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The material is not considered a mutagen. The product has not been tested.

The statement is based on evaluation of data for similar materials or product components.

Carcinogenicity: The material is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Reproductive Toxicity: The material is not considered a reproductive toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Single Exposure: The material is not considered a target organ toxicant (single exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Repeated Exposure: The material is not considered a target organ toxicant (repeated exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Aspiration Hazard: The material is not considered an aspiration hazard.

ADDITIONAL TOXICOLOGY INFORMATION:

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is not expected to be harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual components.

MOBILITY

No data available.

PERSISTENCE AND DEGRADABILITY

This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Partition coefficient n-octanol/water (logarithmic value): No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-

specific or quantity-specific shipping requirements.

DOT Shipping Description: NOT REGULATED AS HAZARDOUS MATERIAL UNDER 49 CFR

IMO/IMDG Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:
Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES: Not applicable

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	05=MA RTK
01-2A=IARC Group 2A	06=NJ RTK
01-2B=IARC Group 2B	07=PA RTK
02=NTP Carcinogen	08-1=TSCA 5(e)
03=EPCRA 313	08-2=TSCA 12(b)
04=CA Proposition 65	

The following components of this material are found on the regulatory lists indicated.
Distillates, hydrotreated heavy paraffinic 05, 06, 07

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AIIIC (Australia), DSL (Canada), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan), IECSC (China), TCSI (Taiwan).

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Motor oil)

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 0 Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:

SECTION 01 - Company SDS Address information was modified.
 SECTION 01 - Product Synonym information was added.
 SECTION 04 - Delayed Health Effects - Target Organ(s) information was modified.
 SECTION 05 - Fire Fighters Protection Measures information was modified.
 SECTION 06 - Personal Precautions, Protective Equipment and Emergency Procedures information was modified.
 SECTION 08 - Eye/Face Protection information was modified.
 SECTION 08 - General Considerations information was modified.
 SECTION 08 - Occupational Exposure Limit Table information was modified.
 SECTION 08 - Personal Protective Equipment List information was deleted.
 SECTION 08 - Personal Protective Equipment information was added.
 SECTION 08 - Respiratory Protection information was added.
 SECTION 08 - Respiratory Protection information was modified.
 SECTION 08 - Skin Protection information was modified.
 SECTION 09 - Physical/Chemical Properties information was modified.
 SECTION 11 - Carcinogenicity information was added.
 SECTION 11 - Germ Cell Mutagenicity information was added.
 SECTION 11 - Reproductive Toxicity information was added.
 SECTION 11 - Specific Target Organ Toxicity - Repeated Exposure information was added.
 SECTION 11 - Specific Target Organ Toxicity - Single Exposure information was added.
 SECTION 11 - Toxicological Information information was added.
 SECTION 11 - Toxicological Information information was modified.
 SECTION 15 - Regulatory Information information was modified.

Revision Date: October 25, 2024

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	PNOS - Particles Not Otherwise Specified

Prepared according to the 29 CFR 1910.1200 (2024) by Chevron.

The information in this SDS is based on the knowledge, information, and belief of Chevron and its affiliates as of the publication date. It is not a quality specification, and no warranty, express or implied, is given. We assume no responsibility or liability for the results of using this material. The information presented here pertains only to the listed product. Since conditions of use are beyond our control, it is the user's responsibility to determine the conditions for safe use of this product and assess its suitability for their application. Users should seek additional guidance if necessary.

SAFETY DATA SHEET



Revision date 03/20/2024

Revision Number 2

1. Identification

Product identifier

Product Name DEXRON III/MERCON ATF

Other means of identification

Safety data sheet number 05134

Product Code(s) L0867-059, L0867-060, L0867-061, L0867-062, L0867-070, L0867-072, L0867-200, L0867-054

UN number or ID number Not applicable.

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Lubriplate Lubricants Company Headquarters
129 Lockwood St.
Newark, NJ 07105
Midwest Office & Plant
1500 Oakdale Ave.
Toledo, OH 43605
419-691-2491
419-693-3806

Emergency telephone number

Emergency Telephone Chem-Tel 1-800-255 3924 (US & Canada only)
01-813-248-0585 (Outside US & Canada)

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**Hazard statements**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Liquid

Physical state Liquid

Odor No information available

Other information

No information available.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.

Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	red
Odor	No information available
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	-40 °C / -40.0 °F	Pour Point:, -40°C/-40°F
Initial boiling point and boiling range	No data available	None known
Flash point	185 °C / 365.0 °F	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	0.872 @ 15°C/60°F	None known
Water solubility	No data available Insoluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	31 - 41 cSt @ 40°C/104°F, 6.9 - 7.9 cSt @ 100°C/212°F	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	Not considered to be explosive
Oxidizing properties	Does not meet the criteria for classification as oxidising
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.

Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	99,999.0000000000	mg/kg
ATEmix (dermal)	99,999.0000000000	mg/kg
ATEmix (inhalation-gas)	99,999.0000000000	ppm
ATEmix (inhalation-dust/mist)	99,999.0000000000	mg/l
ATEmix (inhalation-vapor)	99,999.0000000000	mg/l

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.
Other adverse effects	No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

Note:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

<u>DOT</u>	Not regulated
UN number or ID number	Not applicable.
Proper shipping name	Not applicable
Packing group	Not applicable.

<u>IATA</u>	Not regulated

<u>IMDG</u>	Not regulated
Marine pollutant	No

15. Regulatory information

International Inventories

TSCA Complies.

DSL/NDL	Complies.
EINECS/ELINCS	Complies.
ENCS	Complies.
IECSC	Complies.
KECI	Complies.
PICCS	Complies.
AIIC	Complies.
NZIoC	Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECI - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 0	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 03/20/2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

B65V105

Section 1. Identification

Product name : DIAMOND-CLAD® Clear Coat Urethane Finish (Part B)
Clear Hardener

Product code : B65V105

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 89.8% (oral), 91% (dermal)

GHS label elements

Hazard pictograms



Signal word : Danger

Date of issue/Date of revision : 12/14/2024 **Date of previous issue** : 9/25/2024

B65V105
DIAMOND-CLAD® Clear Coat Urethane Finish (Part B)
Clear Hardener

Version : 16.01 1/19

SHW-85-NA-GHS-US

Section 2. Hazards identification

Hazard statements

- : Flammable liquid and vapor.
- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause respiratory irritation.
- Suspected of causing cancer.

Precautionary statements

Prevention

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

- : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

- : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

- : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Hexamethylene Diisocyanate Polymer	≥75 - ≤90	28182-81-2
n-Butyl Acetate	≤5	123-86-4
Light Aromatic Hydrocarbons	≤3	64742-95-6
trimethylbenzene	≤2.5	25551-13-7
1,3,5-Trimethylbenzene	<1	108-67-8
1,2,4-Trimethylbenzene	<1	95-63-6
Hexamethylene Diisocyanate (max.)	≤0.3	822-06-0
Cumene	≤0.3	98-82-8
Xylene, mixed isomers	≤0.3	1330-20-7
1,2,3-Trimethylbenzene	≤0.3	526-73-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Date of issue/Date of revision : 12/14/2024	Date of previous issue : 9/25/2024	Version : 16.01	3/19
B65V105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part B) Clear Hardener	SHW-85-NA-GHS-US	

Section 4. First aid measures

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : Flammable liquid.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Hexamethylene Diisocyanate Polymer n-Butyl Acetate	28182-81-2 123-86-4	None. NIOSH REL (United States, 10/2020). TWA: 150 ppm 10 hours. TWA: 710 mg/m ³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 150 ppm 8 hours. TWA: 710 mg/m ³ 8 hours. ACGIH TLV (United States, 1/2024). [Butyl acetates] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Light Aromatic Hydrocarbons trimethylbenzene	64742-95-6 25551-13-7	None. ACGIH TLV (United States, 1/2024). [trimethyl benzene, isomers] TWA: 10 ppm 8 hours.
1,3,5-Trimethylbenzene	108-67-8	ACGIH TLV (United States, 1/2024). [trimethyl benzene, isomers] TWA: 10 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours.
1,2,4-Trimethylbenzene	95-63-6	NIOSH REL (United States, 10/2020). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours. ACGIH TLV (United States, 1/2024). TWA: 10 ppm 8 hours.
Hexamethylene Diisocyanate (max.)	822-06-0	ACGIH TLV (United States, 1/2024). TWA: 0.005 ppm 8 hours. TWA: 0.03 mg/m ³ 8 hours. NIOSH REL (United States, 10/2020). TWA: 0.005 ppm 10 hours. TWA: 0.035 mg/m ³ 10 hours. CEIL: 0.02 ppm 10 minutes. CEIL: 0.14 mg/m ³ 10 minutes.

Section 8. Exposure controls/personal protection

Cumene	98-82-8	ACGIH TLV (United States, 1/2024). TWA: 5 ppm 8 hours. NIOSH REL (United States, 10/2020). Absorbed through skin. TWA: 50 ppm 10 hours. TWA: 245 mg/m ³ 10 hours. OSHA PEL (United States, 5/2018). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 245 mg/m ³ 8 hours.
Xylene, mixed isomers	1330-20-7	OSHA PEL (United States, 5/2018). [Xylenes] TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours. ACGIH TLV (United States, 1/2024). [p-xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours.
1,2,3-Trimethylbenzene	526-73-8	ACGIH TLV (United States, 1/2024). [trimethyl benzene, isomers] TWA: 10 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Hexamethylene Diisocyanate Polymer	28182-81-2	CA Quebec Provincial (Canada, 2/2024). [Isocyanate oligomers] Skin sensitizer. Inhalation sensitizer.
n-butyl acetate	123-86-4	CA Alberta Provincial (Canada, 3/2023). OEL: 200 ppm 15 minutes. OEL: 950 mg/m ³ 15 minutes. OEL: 150 ppm 8 hours. OEL: 713 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [butyl acetates, all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 8/2023). [butyl acetate, all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). [butyl acetates] STEV: 150 ppm 15 minutes. TWAEV: 50 ppm 8 hours.
Trimethylbenzene	25551-13-7	CA Alberta Provincial (Canada, 3/2023). [Trimethyl benzene] OEL: 123 mg/m ³ 8 hours. OEL: 25 ppm 8 hours. CA British Columbia Provincial (Canada,

Section 8. Exposure controls/personal protection

Hexamethylene diisocyanate	822-06-0	8/2023). [Trimethyl benzene (mixed isomers)] TWA: 25 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). [Trimethyl benzene] Skin sensitizer. Inhalation sensitizer. TWA: 25 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [Trimethyl benzene (mixed isomers)] TWA: 25 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). [Trimethyl benzene] STEL: 30 ppm 15 minutes. TWA: 25 ppm 8 hours. CA Alberta Provincial (Canada, 3/2023). OEL: 0.005 ppm 8 hours. OEL: 0.03 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 8/2023). Inhalation sensitizer. TWA: 0.005 ppm 8 hours. C: 0.01 ppm CA Quebec Provincial (Canada, 2/2024). Skin sensitizer. Inhalation sensitizer. TWA: 0.005 ppm 8 hours. TWA: 0.034 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 0.015 ppm 15 minutes. TWA: 0.005 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [Isocyanates, organic compounds] Ceiling Limit: 0.02 ppm TWA: 0.005 ppm 8 hours. CA Alberta Provincial (Canada, 3/2023). OEL: 50 ppm 8 hours. OEL: 246 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 8/2023). TWA: 25 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 6/2019). TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). TWA: 5 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 74 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Alberta Provincial (Canada, 3/2023). [Dimethylbenzene] OEL: 100 ppm 8 hours. OEL: 651 mg/m³ 15 minutes. OEL: 150 ppm 15 minutes. OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 8/2023). [Xylene (o, m & p isomers)] TWA: 100 ppm 8 hours.
Cumene	98-82-8	
Xylene	1330-20-7	

Section 8. Exposure controls/personal protection

		STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 2/2024). [Xylene] TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 6/2019). [Xylene (o-, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). [Xylene] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.

Occupational exposure limits (Mexico)

	CAS #	Exposure limits
n-Butyl Acetate	123-86-4	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.
trimethylbenzene	25551-13-7	NOM-010-STPS-2014 (Mexico, 4/2016). [Trimetil benceno, mezcla de Isómeros] TWA: 25 ppm 8 hours.
Cumene	98-82-8	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.

Biological exposure indices (United States)

Ingredient name	Exposure indices
Hexamethylene Diisocyanate (max.)	ACGIH BEI (United States, 1/2024) BEI: 15 µg/g creatinine, 1,6-hexamethylene diamine [in urine]. Sampling time: end of shift.
Xylene, mixed isomers	ACGIH BEI (United States, 1/2024) [xylenes (technical or commercial grades)] BEI: 0.3 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

No exposure indices known.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Date of issue/Date of revision	: 12/14/2024	Date of previous issue	: 9/25/2024	Version	: 16.01	9/19
B65V105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part B) Clear Hardener				SHW-85-NA-GHS-US	

Section 8. Exposure controls/personal protection

Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Clear.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: 123°C (253.4°F)
Flash point	: Closed cup: 47°C (116.6°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 1 (butyl acetate = 1)
Flammability	: Flammable liquid.
Lower and upper explosion limit/flammability limit	: Lower: 0.7% Upper: 7.6%
Vapor pressure	: 1.3 kPa (10 mm Hg)
Relative vapor density	: 4 [Air = 1]
Relative density	: 1.12
Solubility(ies)	:

Section 9. Physical and chemical properties

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >20.5 mm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Heat of combustion	: 3.574 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Dusts and mists	Rat	18500 mg/m ³	1 hours
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
trimethylbenzene	LD50 Oral	Rat	8970 mg/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Hexamethylene Diisocyanate (max.)	LC50 Inhalation Dusts and mists	Rat	124 mg/m ³	4 hours
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-

Irritation/Corrosion

Date of issue/Date of revision	: 12/14/2024	Date of previous issue	: 9/25/2024	Version	: 16.01	11/19
B65V105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part B) Clear Hardener				SHW-85-NA-GHS-US	

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 mg	-
n-Butyl Acetate	Skin - Moderate irritant	Rabbit	-	500 mg	-
	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Light Aromatic Hydrocarbons	Eyes - Mild irritant	Rabbit	-	24 hours 100 uL	-
trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
1,3,5-Trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.
Xylene, mixed isomers	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Hexamethylene Diisocyanate Polymer	Category 3	-	Respiratory tract irritation
n-Butyl Acetate	Category 3	-	Narcotic effects
Light Aromatic Hydrocarbons	Category 3	-	Respiratory tract irritation
1,3,5-Trimethylbenzene	Category 3	-	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	Respiratory tract irritation
Hexamethylene Diisocyanate (max.)	Category 3	-	Respiratory tract irritation
Cumene	Category 3	-	Narcotic effects
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
1,2,3-Trimethylbenzene	Category 3	-	Narcotic effects
	Category 3	-	Respiratory tract irritation
	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-

Aspiration hazard

Name	Result
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1
trimethylbenzene	ASPIRATION HAZARD - Category 1
1,3,5-Trimethylbenzene	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
1,2,3-Trimethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4368.99 mg/kg
Inhalation (vapors)	945.02 mg/l
Inhalation (dusts and mists)	5.15 mg/l

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - <i>Artemia salina</i>	48 hours
trimethylbenzene	Acute LC50 18000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute LC50 5600 µg/l Marine water	Crustaceans - <i>Palaemonetes pugio</i>	48 hours
1,3,5-Trimethylbenzene	Acute LC50 13000 µg/l Marine water	Crustaceans - <i>Cancer magister</i> - Zoea	48 hours
	Acute LC50 12520 µg/l Fresh water	Fish - <i>Carassius auratus</i>	96 hours
1,2,4-Trimethylbenzene	Chronic NOEC 0.4 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
	Acute LC50 4910 µg/l Marine water	Crustaceans - <i>Elasmopus pecteniscus</i> - Adult	48 hours
Cumene	Acute LC50 7720 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 2600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 7.4 mg/l Marine water	Crustaceans - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 10.6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
Xylene, mixed isomers	Acute LC50 2700 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - <i>Palaemonetes pugio</i>	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Light Aromatic Hydrocarbons	-	-	Readily
Xylene, mixed isomers	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hexamethylene Diisocyanate Polymer	-	367.7	Low
Light Aromatic Hydrocarbons	-	10 to 2500	High
1,3,5-Trimethylbenzene	-	161	Low
1,2,4-Trimethylbenzene	-	243	Low
Hexamethylene Diisocyanate (max.)	-	57.63	Low
Cumene	-	35.48	Low
Xylene, mixed isomers	-	8.1 to 25.9	Low
1,2,3-Trimethylbenzene	-	194.98	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials. ERG No. 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). ERG No. 128	- ERG No. 128	-	Emergency schedules F-E, S-E

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

SARA 313

All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED and rely on information provided to us by our raw material suppliers. Our suppliers often provide an estimated value or range less than a certain upper limit. We calculate MAXIMUM THEORETICAL VALUES using defined values, if provided, or the upper limit reported by our supplier. Additionally, the suppliers' information may include amounts present in the product as unintentional byproducts or impurities. Variations may occur in individual batches due to adjustments made during production.

Ingredient name	% by weight	CAS number
Cumene	0.2	98-82-8

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

International lists

Australia inventory (AIIIC): Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		2
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method

History

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Date of previous issue : 9/25/2024

Version : 16.01

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is

Date of issue/Date of revision : 12/14/2024	Date of previous issue : 9/25/2024	Version : 16.01	18/19
B65V105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part B) Clear Hardener	SHW-85-NA-GHS-US	

Section 16. Other information

responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

B65C105

Section 1. Identification

Product name : DIAMOND-CLAD® Clear Coat Urethane Finish (Part C)
Clear Catalyst

Product code : B65C105

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

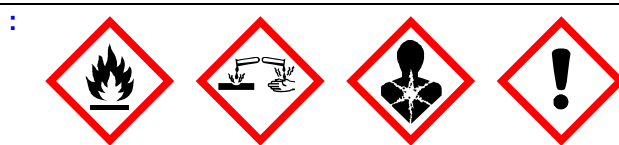
Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 2
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 1B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 1.1% (dermal), 1.1% (inhalation) 

GHS label elements

Date of issue/Date of revision : 12/13/2024	Date of previous issue : 9/25/2024	Version : 24.01	1/21
B65C105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part C) Clear Catalyst	SHW-85-NA-GHS-US	

Section 2. Hazards identification

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapor.
Harmful if swallowed, in contact with skin or if inhaled.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of causing genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

: IF exposed: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
n-Butyl Acetate	≥25 - ≤50	123-86-4
2,4-Pentanedione	≥10 - ≤28	123-54-6
Xylene, mixed isomers	≥10 - <17	1330-20-7
Ethylbenzene	≤4.5	100-41-4
2-Phenoxyethanol (industrial)	≤3	122-99-6
Light Aromatic Hydrocarbons	≤3	64742-95-6
Dibutyltin Dilaurate	≤3	77-58-7
trimethylbenzene	<1	25551-13-7
1,3,5-Trimethylbenzene	≤0.3	108-67-8
1,2,4-Trimethylbenzene	≤0.3	95-63-6
Octene	≤0.3	111-66-0
Cumene	≤0.3	98-82-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled. Causes damage to organs following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Flammable liquid.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact

Section 6. Accidental release measures

information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures
- : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene
- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities
- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
n-Butyl Acetate	123-86-4	NIOSH REL (United States, 10/2020). TWA: 150 ppm 10 hours. TWA: 710 mg/m³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 150 ppm 8 hours. TWA: 710 mg/m³ 8 hours. ACGIH TLV (United States, 1/2024). [Butyl acetates] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
2,4-Pentanedione	123-54-6	ACGIH TLV (United States, 1/2024). Absorbed through skin. TWA: 25 ppm 8 hours.
Xylene, mixed isomers	1330-20-7	OSHA PEL (United States, 5/2018). [Xylenes] TWA: 100 ppm 8 hours.

Section 8. Exposure controls/personal protection

Ethylbenzene	100-41-4	TWA: 435 mg/m³ 8 hours. ACGIH TLV (United States, 1/2024). [p-xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours. ACGIH TLV (United States, 1/2024). Ototoxicant. TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.
2-Phenoxyethanol (industrial) Light Aromatic Hydrocarbons Dibutyltin Dilaurate	122-99-6 64742-95-6 77-58-7	None. None. ACGIH TLV (United States, 1/2024). [Tin, organic compounds] Absorbed through skin. TWA: 0.1 mg/m³, (as Sn) 8 hours. STEL: 0.2 mg/m³, (as Sn) 15 minutes. NIOSH REL (United States, 10/2020). [tin organic compounds] Absorbed through skin. TWA: 0.1 mg/m³, (as Sn) 10 hours. OSHA PEL (United States, 5/2018). [Tin, organic compounds] TWA: 0.1 mg/m³, (as Sn) 8 hours. ACGIH TLV (United States, 1/2024). [trimethyl benzene, isomers] TWA: 10 ppm 8 hours. ACGIH TLV (United States, 1/2024). [trimethyl benzene, isomers] TWA: 10 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours. NIOSH REL (United States, 10/2020). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours. ACGIH TLV (United States, 1/2024). TWA: 10 ppm 8 hours. OARS WEEL (United States, 4/2022). TWA: 75 ppm 8 hours. ACGIH TLV (United States, 1/2024). TWA: 5 ppm 8 hours. NIOSH REL (United States, 10/2020). Absorbed through skin. TWA: 50 ppm 10 hours. TWA: 245 mg/m³ 10 hours. OSHA PEL (United States, 5/2018). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 245 mg/m³ 8 hours.
trimethylbenzene	25551-13-7	
1,3,5-Trimethylbenzene	108-67-8	
1,2,4-Trimethylbenzene	95-63-6	
Octene	111-66-0	
Cumene	98-82-8	

Section 8. Exposure controls/personal protection

[Occupational exposure limits \(Canada\)](#)

Ingredient name	CAS #	Exposure limits
n-butyl acetate	123-86-4	CA Alberta Provincial (Canada, 3/2023). OEL: 200 ppm 15 minutes. OEL: 950 mg/m ³ 15 minutes. OEL: 150 ppm 8 hours. OEL: 713 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). [butyl acetates, all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 8/2023). [butyl acetate, all isomers] STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). [butyl acetates] STEV: 150 ppm 15 minutes. TWAEV: 50 ppm 8 hours.
2,4-Pentanedione	123-54-6	CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. TWA: 25 ppm 8 hours. CA British Columbia Provincial (Canada, 8/2023). Absorbed through skin. Notes: No British Columbia exposure limit at this time
Xylene	1330-20-7	CA Alberta Provincial (Canada, 3/2023). [Dimethylbenzene] OEL: 100 ppm 8 hours. OEL: 651 mg/m ³ 15 minutes. OEL: 150 ppm 15 minutes. OEL: 434 mg/m ³ 8 hours. CA British Columbia Provincial (Canada, 8/2023). [Xylene (o, m & p isomers)] TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 2/2024). [Xylene] TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m ³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m ³ 15 minutes. CA Ontario Provincial (Canada, 6/2019). [Xylene (o-, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). [Xylene] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Ethylbenzene	100-41-4	CA Alberta Provincial (Canada, 3/2023). OEL: 100 ppm 8 hours. OEL: 434 mg/m ³ 8 hours.

Section 8. Exposure controls/personal protection

		OEL: 543 mg/m³ 15 minutes. OEL: 125 ppm 15 minutes. CA British Columbia Provincial (Canada, 8/2023). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). TWA: 20 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
2-Phenoxyethanol	122-99-6	CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. TWA: 141 mg/m³ 8 hours. TWA: 25 ppm 8 hours.
Dibutyltin dilaurate	77-58-7	CA Alberta Provincial (Canada, 3/2023). [Tin Organic compounds] Absorbed through skin. OEL: 0.2 mg/m³, (as Sn) 15 minutes. OEL: 0.1 mg/m³, (as Sn) 8 hours. CA British Columbia Provincial (Canada, 8/2023). [Tin - Organic compounds] Absorbed through skin. TWA: 0.1 mg/m³, (as Sn) 8 hours. STEL: 0.2 mg/m³, (as Sn) 15 minutes. CA Ontario Provincial (Canada, 6/2019). [Tin (Organic compounds)] Absorbed through skin. TWA: 0.1 mg/m³, (as Sn) 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). [Tin organic compounds] Absorbed through skin. STEL: 0.2 mg/m³, (measured as Sn) 15 minutes. TWA: 0.1 mg/m³, (measured as Sn) 8 hours.
Cumene	98-82-8	CA Alberta Provincial (Canada, 3/2023). OEL: 50 ppm 8 hours. OEL: 246 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 8/2023). TWA: 25 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 6/2019). TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 2/2024). TWA: 5 ppm 8 hours. CA Saskatchewan Provincial (Canada, 4/2021). STEL: 74 ppm 15 minutes. TWA: 50 ppm 8 hours.

[Occupational exposure limits \(Mexico\)](#)

Section 8. Exposure controls/personal protection

	CAS #	Exposure limits
n-Butyl Acetate	123-86-4	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.
2,4-Pentanedione	123-54-6	NOM-010-STPS-2014 (Mexico, 4/2016). Absorbed through skin. TWA: 20 ppm 8 hours.
Xylene, mixed isomers	1330-20-7	NOM-010-STPS-2014 (Mexico, 4/2016). [Xileno, mezcla] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Ethylbenzene	100-41-4	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 20 ppm 8 hours.
Dibutyltin Dilaurate	77-58-7	NOM-010-STPS-2014 (Mexico, 4/2016). [Estaño, compuestos orgánicos] Absorbed through skin. TWA: 0.1 mg/m ³ , (as Sn) 8 hours. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes.
Cumene	98-82-8	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.

Biological exposure indices (United States)

Ingredient name	Exposure indices
Xylene, mixed isomers	ACGIH BEI (United States, 1/2024) [xylenes (technical or commercial grades)] BEI: 0.3 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
Ethylbenzene	ACGIH BEI (United States, 1/2024) BEI: 150 mg/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

Ingredient name	Exposure indices
Xylene, mixed isomers	Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methyl hippuric acids [in urine]. Sampling time: at the end of the work shift.
Ethylbenzene	Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) BEI: 0.7 g/g creatinine [non-specific. The determinant is nonspecific, since it can be

Section 8. Exposure controls/personal protection

found after exposure to other chemicals.; semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening test if a quantitative test is not possible.], Sum of mandelic acid and acid phenylglyoxylic [in urine]. Sampling time: at the end of the shift at the end of the work week.

BEI: semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening test if a quantitative test is not possible., ethylbenzene [in exhaled air]. Sampling time: uncritical.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : 123°C (253.4°F)
- Flash point** : Closed cup: 37°C (98.6°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 1 (butyl acetate = 1)
- Flammability** : Flammable liquid.
- Lower and upper explosion limit/flammability limit** : Lower: 0.7%
Upper: 11.4%
- Vapor pressure** : 1.3 kPa (10 mm Hg)
- Relative vapor density** : 3.5 [Air = 1]
- Relative density** : 0.91
- Solubility(ies)** :

Media	Result
cold water	Not soluble

- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <20.5 mm²/s (<20.5 cSt)
- Molecular weight** : Not applicable.
- Heat of combustion** : 31.806 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
2,4-Pentanedione	LD50 Oral	Rat	55 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2-Phenoxyethanol (industrial)	LD50 Dermal	Rat	14422 mg/kg	-
	LD50 Oral	Rat	1260 mg/kg	-
Light Aromatic Hydrocarbons	LD50 Oral	Rat	8400 mg/kg	-
Dibutyltin Dilaurate	LD50 Oral	Rat	2071 mg/kg	-
trimethylbenzene	LD50 Oral	Rat	8970 mg/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
2,4-Pentanedione	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	6 hours 11.2 MI I	-
	Skin - Mild irritant	Rabbit	-	488 mg	-
	Skin - Moderate irritant	Rabbit	-	48 hours 11.2 MI I	-
	Skin - Moderate irritant	Rabbit	-	6 hours 33.6 MI I	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15	-

Section 11. Toxicological information

2-Phenoxyethanol (industrial)	Eyes - Moderate irritant	Rabbit	-	mg	-
	Eyes - Severe irritant	Rabbit	-	6 mg	-
				24 hours 250	-
				ug	-
Light Aromatic Hydrocarbons	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	-
Dibutyltin Dilaurate	Eyes - Mild irritant	Rabbit	-	24 hours 100	-
				uL	-
trimethylbenzene	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
1,3,5-Trimethylbenzene				mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
Cumene				mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10	-
				mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs

Section 11. Toxicological information

n-Butyl Acetate	Category 3	-	Narcotic effects
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
Ethylbenzene	Category 3	-	Narcotic effects
2-Phenoxyethanol (industrial)	Category 3	-	Narcotic effects
Light Aromatic Hydrocarbons	Category 3	-	Respiratory tract irritation
Dibutyltin Dilaurate	Category 3	-	Respiratory tract irritation
1,3,5-Trimethylbenzene	Category 1	-	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	-	-
Cumene	Category 3	-	Respiratory tract irritation
			Respiratory tract irritation
			Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-
Ethylbenzene	Category 2	-	-
Dibutyltin Dilaurate	Category 1	oral	-

Aspiration hazard

Name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Light Aromatic Hydrocarbons	ASPIRATION HAZARD - Category 1
trimethylbenzene	ASPIRATION HAZARD - Category 1
1,3,5-Trimethylbenzene	ASPIRATION HAZARD - Category 1
1,2,4-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Octene	ASPIRATION HAZARD - Category 1
Cumene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled. Causes damage to organs following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : Suspected of causing genetic defects.

Teratogenicity : May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Route	ATE value
Oral	1578.3 mg/kg
Dermal	1004.82 mg/kg
Inhalation (vapors)	10.32 mg/l
Inhalation (dusts and mists)	54.64 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - <i>Artemia salina</i>	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
2,4-Pentanedione	Acute EC50 75000 µg/l Fresh water	Crustaceans - <i>Ceriodaphnia reticulata</i> - Larvae	48 hours
	Acute LC50 47600 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
Xylene, mixed isomers	Acute LC50 60100 µg/l Fresh water	Fish - <i>Lepomis macrochirus</i>	96 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - <i>Palaemonetes pugio</i>	48 hours
Ethylbenzene	Acute LC50 13400 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
2-Phenoxyethanol (industrial)	Acute LC50 4200 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
Dibutyltin Dilaurate	Acute LC50 344000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Chronic EC10 >2 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	96 hours
trimethylbenzene	Acute LC50 5600 µg/l Marine water	Crustaceans - <i>Palaemonetes pugio</i>	48 hours
1,3,5-Trimethylbenzene	Acute LC50 13000 µg/l Marine water	Crustaceans - <i>Cancer magister</i> - Zoea	48 hours
	Acute LC50 12520 µg/l Fresh water	Fish - <i>Carassius auratus</i>	96 hours
	Chronic NOEC 0.4 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - <i>Elasmopus pecteniscus</i> - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
Octene	Acute LC50 4.8 mg/l Fresh water	Fish - <i>Danio rerio</i> - Young	96 hours
Cumene	Acute EC50 2600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 7.4 mg/l Marine water	Crustaceans - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 10.6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily
Light Aromatic Hydrocarbons	-	-	Readily

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	Low
2-Phenoxyethanol (industrial)	-	0.3493	Low
Light Aromatic Hydrocarbons	-	10 to 2500	High
Dibutyltin Dilaurate	-	2.91	Low
1,3,5-Trimethylbenzene	-	161	Low
1,2,4-Trimethylbenzene	-	243	Low
Octene	-	3.1	Low
Cumene	-	35.48	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1992	UN1992	UN1992	UN1992	UN1992
UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N. O.S. (2,4-Pentanedione, n-Butyl Acetate)	FLAMMABLE LIQUID, TOXIC, N. O.S. (2,4-Pentanedione, n-Butyl Acetate)	FLAMMABLE LIQUID, TOXIC, N. O.S. (2,4-Pentanedione, n-Butyl Acetate)	FLAMMABLE LIQUID, TOXIC, N.O.S. (2,4-Pentanedione, n-Butyl Acetate)	FLAMMABLE LIQUID, TOXIC, N. O.S. (2,4-Pentanedione, n-Butyl Acetate)
Transport hazard class(es)	3 (6.1)  	3 (6.1)  	3 (6.1)  	3 (6.1)  	3 (6.1)  

Section 14. Transport information

Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	- ERG No. 131	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.26-2.36 (Class 6). ERG No. 131	- ERG No. 131	- 	Emergency schedules F-E, S-D

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

TSCA 5(a)2 proposed significant new use rules: 2,4-Pentanedione

SARA 313

All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED and rely on information provided to us by our raw material suppliers. Our suppliers often provide an estimated value or range less than a certain upper limit. We calculate MAXIMUM THEORETICAL VALUES using defined values, if provided, or the upper limit reported by our supplier. Additionally, the suppliers' information may include amounts present in the product as unintentional byproducts or impurities. Variations may occur in individual batches due to adjustments made during production.

Ingredient name	% by weight	CAS number
2-Phenoxyethanol (industrial)	3	122-99-6
Xylene, mixed isomers	17	1330-20-7
Ethylbenzene	4	100-41-4
Cumene	0.1	98-82-8
Glycol Ethers (SARA)	3	

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 15. Regulatory information

[International regulations](#)

[Montreal Protocol](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[International lists](#)

: **Australia inventory (AIIIC)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

[Hazardous Material Information System \(U.S.A.\)](#)

Health	*	4
Flammability		3
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

[Procedure used to derive the classification](#)

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

[History](#)

Date of issue/Date of revision	: 12/13/2024	Date of previous issue	: 9/25/2024	Version	: 24.01	20/21
B65C105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part C) Clear Catalyst				SHW-85-NA-GHS-US	

Section 16. Other information

Date of printing	: 12/13/2024
Date of issue/Date of revision	: 12/13/2024
Date of previous issue	: 9/25/2024
Version	: 24.01
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Date of issue/Date of revision	: 12/13/2024	Date of previous issue	: 9/25/2024	Version	: 24.01	21/21
B65C105	DIAMOND-CLAD® Clear Coat Urethane Finish (Part C) Clear Catalyst				SHW-85-NA-GHS-US	



SAFETY DATA SHEET

1. Identification

Product identifier	DIESEL FUELS
Other means of identification	
SDS number	102-GHS
Synonyms	Diesel Fuels All Grades, Diesel Fuel No.2, Fuel Oil No.2, High Sulfur Diesel Fuel, Low Sulfur Diesel Fuel, Ultra Low Sulfur Diesel Fuel, CARB (California Air Resource Board) Diesel Fuel, Off-Road Diesel Fuel, Dyed Diesel Fuel, X Grade Diesel Fuel, X-1 Diesel Fuel, R5 ULSD, B5 ULS D See section 16 for complete information.
Recommended use	Motor Fuel Refinery feedstock.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593 CorpHSE@valero.com Industrial Hygienist
General Assistance	
E-Mail	
Contact Person	
Emergency Telephone	24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. May be fatal if swallowed and enters airways.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.

Response	If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
Storage	Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Fuels, diesel, no. 2	68476-34-6	85 - 100
Biodiesel - Fatty acid methyl esters	67762-38-3	0 - 10
Fuels, diesel, C9-18-alkane branched and linear	1159170-26-9	0 - 5
n-Nonane	111-84-2	1 - 3
Octane (All isomers)	111-65-9	1 - 2
Hexane (Other isomers)	96-14-0	0 - 1
Naphthalene	91-20-3	0 - 1
n-Heptane	142-82-5	0 - 1
n-Hexane	110-54-3	0 - 1

4. First-aid measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin contact	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. The toxicological properties of this material have not been fully investigated.
General information	If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire-fighting equipment/instructions	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas. Use non-sparking tools and explosion-proof equipment. Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment. Clean up in accordance with all applicable regulations.
Environmental precautions	If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

7. Handling and storage

Precautions for safe handling	Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Wear personal protective equipment. Avoid breathing mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

**Conditions for safe storage,
including any incompatibilities**

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm
Octane (All isomers) (CAS 111-65-9)	PEL	2350 mg/m3 500 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fuels, diesel, no. 2 (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Hexane (Other isomers) (CAS 96-14-0)	STEL	1000 ppm	
Naphthalene (CAS 91-20-3)	TWA	500 ppm	
	STEL	15 ppm	
n-Heptane (CAS 142-82-5)	TWA	10 ppm	
	STEL	500 ppm	
n-Hexane (CAS 110-54-3)	TWA	400 ppm	
	STEL	50 ppm	
n-Nonane (CAS 111-84-2)	TWA	200 ppm	
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Hexane (Other isomers) (CAS 96-14-0)	Ceiling	1800 mg/m3
		510 ppm
		350 mg/m3
Naphthalene (CAS 91-20-3)	STEL	100 ppm
		75 mg/m3
		15 ppm
n-Heptane (CAS 142-82-5)	Ceiling	50 mg/m3
		10 ppm
		1800 mg/m3
n-Hexane (CAS 110-54-3)	TWA	440 ppm
		350 mg/m3
		85 ppm
n-Nonane (CAS 111-84-2)	TWA	180 mg/m3
		50 ppm
		1050 mg/m3
Octane (All isomers) (CAS 111-65-9)	Ceiling	200 ppm
		1800 mg/m3
		385 ppm
	TWA	350 mg/m3
		75 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
	0.4 mg/l	2,5-Hexanedione, without hydrolysis		*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Fuels, diesel, no. 2 (CAS 68476-34-6) Can be absorbed through the skin.

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Skin protection

Hand protection Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Other Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.

Respiratory protection Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Liquid (may be dyed red).
Physical state	Liquid.
Form	Liquid.
Color	Clear. Straw.
Odor	Kerosene (strong).
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-60.07 °F (-51.15 °C) Estimated
Initial boiling point and boiling range	325 - 700 °F (162.78 - 371.11 °C)
Flash point	> 100.0 °F (> 37.8 °C) Closed Cup
Evaporation rate	0.02
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	0.4 %
Flammability limit - upper (%)	8 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 1 mm Hg (20°C)
Vapor density	3 (Air = 1)
Relative density	0.82 - 0.87
Relative density temperature	60 °F (15.56 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	494.96 °F (257.2 °C)
Decomposition temperature	Not available.
Viscosity	2 - 4.5 mm ² /s

10. Stability and reactivity

Reactivity	Stable at normal conditions.
Chemical stability	Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	Harmful if inhaled. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.
Skin contact	Causes skin irritation.
Eye contact	May cause eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions.

Information on toxicological effects

Acute toxicity	Harmful if inhaled. Harmful: may cause lung damage if swallowed. The toxicological properties of this material have not been fully investigated.

Components	Species	Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)		
Acute		
Inhalation		
LC50	Rat	4.1 mg/l, 4 hours

Components	Species	Test Results
Naphthalene (CAS 91-20-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
<i>Oral</i>		
LD50	Rat	490 mg/kg
n-Heptane (CAS 142-82-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	103 mg/l, 4 Hours
n-Hexane (CAS 110-54-3)		
Acute		
<i>Oral</i>		
LD50	Rat	28710 mg/kg
n-Nonane (CAS 111-84-2)		
Acute		
<i>Inhalation</i>		
LC50	Rat	3200 mg/l, 4 Hours
Octane (All isomers) (CAS 111-65-9)		
Acute		
<i>Inhalation</i>		
LC50	Rat	118 mg/l, 4 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Suspected of causing cancer. International Agency for Research on Cancer (IARC): Whole diesel engine exhaust – IARC Group 1. Exposure may cause lung cancer and also noted a positive association with an increased risk of bladder cancer. Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Fuels, diesel, no. 2 (CAS 68476-34-6)	3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
NTP Report on Carcinogens		
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.	
Reproductive toxicity	Suspected of damaging fertility or the unborn child. Napthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Blood. Liver. Thymus.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.	

Further information

Symptoms may be delayed. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Toxicological properties of this material have not been fully investigated.

12. Ecological information**Ecotoxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components	Species		Test Results
Fuels, diesel, no. 2 (CAS 68476-34-6)			
Aquatic			
Acute			
Crustacea	EL50	Daphnia magna	68 mg/l, 48 hours
Fish	LL50	Oncorhynchus mykiss	65 mg/l, 96 hours
Naphthalene (CAS 91-20-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	0.95 - 1.62 mg/l, 96 hours
n-Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	4924 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Persistence and degradability	Not available.		
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
Hexane (Other isomers) (CAS 96-14-0)	3.6		
Octane (All isomers) (CAS 111-65-9)	5.18		
n-Heptane (CAS 142-82-5)	4.66		
n-Hexane (CAS 110-54-3)	3.9		
n-Nonane (CAS 111-84-2)	5.46		
Mobility in soil	Not available.		
Other adverse effects	Not available.		

13. Disposal considerations**Disposal instructions**

Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

Hazardous waste code

D001: Waste Flammable material with a flash point <140 °F

US RCRA Hazardous Waste U List: Reference

Naphthalene (CAS 91-20-3)

U165

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Offer rinsed packaging material to local recycling facilities.

14. Transport information**DOT**

UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	Combustible Liquid
Subsidiary risk	-
Packing group	III

Environmental hazards

Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242

IATA

UN number	UN1202
UN proper shipping name	Diesel fuel
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	Yes
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1202
UN proper shipping name	DIESEL FUEL
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Environmental hazards	

Marine pollutant Yes

EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information

US federal regulations**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

n-Nonane (CAS 111-84-2) 1.0 % One-Time Export Notification only.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hexane (Other isomers) (CAS 96-14-0)	LISTED
Naphthalene (CAS 91-20-3)	LISTED
n-Heptane (CAS 142-82-5)	LISTED
n-Hexane (CAS 110-54-3)	LISTED
n-Nonane (CAS 111-84-2)	LISTED
Octane (All isomers) (CAS 111-65-9)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Naphthalene	91-20-3	0 - 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Naphthalene (CAS 91-20-3)

n-Hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Hexane (Other isomers) (CAS 96-14-0)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. New Jersey Worker and Community Right-to-Know Act

Fuels, diesel, no. 2 (CAS 68476-34-6)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Fuels, diesel, no. 2 (CAS 68476-34-6)

Hexane (Other isomers) (CAS 96-14-0)

Naphthalene (CAS 91-20-3)

n-Heptane (CAS 142-82-5)

n-Hexane (CAS 110-54-3)

n-Nonane (CAS 111-84-2)

Octane (All isomers) (CAS 111-65-9)

US. Rhode Island RTK

Naphthalene (CAS 91-20-3)

n-Hexane (CAS 110-54-3)

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)

Toluene (CAS 108-88-3)

International Inventories

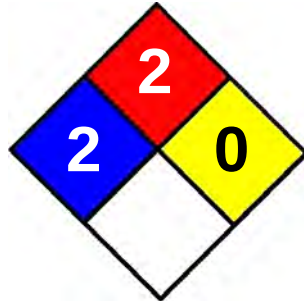
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	13-May-2013
Revision date	23-May-2014
Version #	04
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA Ratings	



Disclaimer	This material Safety Data Sheet (SDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.



DOT 3 Brake Fluid

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 12/09/2015 Date of issue: 11/16/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: DOT 3 Brake Fluid

Product Code: WPS-CCC-011

1.2. Intended Use of the Product

Use of the substance/mixture: Automotive brake fluid.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Complex Chemical Co.

177 Complex Chemical

Tallulah, La. 71282

TEL: 318-574-0382

1.4. Emergency Telephone Number

Emergency Number : 800-825-9720

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US classification

Eye Dam. 1 H318

STOT RE 2 H373

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H318 - Causes serious eye damage.

H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Precautionary Statements (GHS-US)

: P260 - Do not breathe vapors, mist, or spray.

P280 - Wear protective gloves, protective clothing, and eye protection.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a poison center or doctor.

P314 - Get medical advice/attention if you feel unwell.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Triethylene glycol monobutyl ether	(CAS No) 143-22-6	15 - 50	Eye Dam. 1, H318
Diethylene glycol	(CAS No) 111-46-6	15 - 25	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Triethylene glycol monoethyl ether	(CAS No) 112-50-5	10 - 15	Not classified

DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Diethylene glycol monobutyl ether	(CAS No) 112-34-5	5 - 15	Flam. Liq. 4, H227 Eye Irrit. 2A, H319
Ethanol, 2-(2-propoxyethoxy)-	(CAS No) 6881-94-3	2 - 5	Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Acute exposure of humans to ethylene glycol by ingesting large quantities causes three stages of health effects. CNS depression, including such symptoms as vomiting, drowsiness, coma, respiratory failure, convulsions, metabolic changes, and gastrointestinal upset are followed by cardiopulmonary effects and later renal damage.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle in accordance with standard industrial practices, and ensure appropriate ventilation. Avoid all contact with skin, eyes, clothing. Do not release into the environment.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Automotive brake fluid.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Diethylene glycol (111-46-6)		
USA AIHA	WEEL TWA (mg/m ³)	10 mg/m ³
Diethylene glycol monobutyl ether (112-34-5)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm (inhalable fraction and vapor)

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Face shield.



Materials for Protective Clothing

: Chemically resistant materials and fabrics.

Hand Protection

: Wear protective gloves.

Eye Protection

: Chemical goggles or face shield.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber
Odor	: Etheric
Odor Threshold	: No data available
pH	: 10.5
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available

DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling Point	: 205 °C (401 °F)
Flash Point	: 203 °C (397 °F)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: < 1500 cSt

9.2. Other Information

VOC content : None

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates : Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Triethylene glycol monobutyl ether (143-22-6)	
LD50 Oral Rat	5300 mg/kg
LD50 Dermal Rabbit	3480 mg/kg
Triethylene glycol monoethyl ether (112-50-5)	
LD50 Oral Rat	7750 mg/kg
Diethylene glycol (111-46-6)	
LD50 Oral Rat	1120 mg/kg
LD50 Dermal Rabbit	11890 mg/kg
Diethylene glycol monobutyl ether (112-34-5)	
LD50 Oral Rat	5660 mg/kg
LD50 Dermal Rabbit	2700 mg/kg

Skin Corrosion/Irritation: Not classified

pH: 10.5

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 10.5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Acute exposure of humans to ethylene glycol by ingesting large quantities causes three stages of health effects. CNS depression, including such symptoms as vomiting, drowsiness, coma, respiratory failure, convulsions, metabolic changes, and gastrointestinal upset are followed by cardiopulmonary effects and later renal damage.

DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

Triethylene glycol monobutyl ether (143-22-6)	
LC50 Fish 1	2400 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	2400 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
Diethylene glycol (111-46-6)	
LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Diethylene glycol monobutyl ether (112-34-5)	
LC50 Fish 1	1300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

DOT 3 Brake Fluid	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

DOT 3 Brake Fluid	
Bioaccumulative Potential	Not established.
Triethylene glycol monobutyl ether (143-22-6)	
BCF fish 1	(no significant bioaccumulation)
Log Pow	0.51 (at 25 °C)
Diethylene glycol (111-46-6)	
BCF fish 1	100 - 180
Log Pow	-1.98 (at 25 °C)
Diethylene glycol monobutyl ether (112-34-5)	
BCF fish 1	(no bioconcentration expected)

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

DOT 3 Brake Fluid	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Triethylene glycol monobutyl ether (143-22-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Triethylene glycol monoethyl ether (112-50-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
Diethylene glycol (111-46-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
Diethylene glycol monobutyl ether (112-34-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
Ethanol, 2-(2-propoxyethoxy)- (6881-94-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2 US State Regulations

Diethylene glycol (111-46-6)
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date	: 12/09/2015
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)



DP-40 Spray Can

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: DP-40 Spray Can
SDS Number: DP-40 SC
Revision Date: 6/14/2022
Product Use: NDT Inspection Visible Penetrant, Methods B, C and D
Supplier Details: Sherwin Inc.
5530 Borwick Avenue
South Gate, CA 90280
Phone: 562-861-6324
Email: sherwin@sherwininc.com
Internet: www.sherwininc.com

Emergency telephone number:

ChemTel 1-800-255-3924 in U.S.A, Canada, Puerto Rico and US Virgin Islands;
ChemTel +1-813-248-0585 outside U.S.A, Canada, Puerto Rico and US Virgin Islands
ChemTel Brazil: 0-800-591-6042, China: 400-120-0751, India: 000-800-100-4086 and Mexico: 01-800-099-0731

2 HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Aspiration hazard, 1
Physical, Flammable Aerosols, 1

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H304 - May be fatal if swallowed and enters airways
H222 - Extremely flammable aerosol
H229 - Pressurized container: may burst if heated

GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash ... thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311 - IF exposed or concerned: Call a POISON CENTER/doctor/...
P370 + P378 - In case of fire: Use dry chemical, alcohol resistant foam or dry sand to extinguish.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.



DP-40 Spray Can

3

COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Ingredients:	
	%	Chemical Name:
68476-86-8	40-50%	Propane/ Isobutane
64742-47-8	10-30%	Distillates (petroleum), hydrotreated light
64742-94-5	<3%	Solvent naphtha (petroleum), heavy arom.
0	10-30%	Highly refined, low viscosity base oil

Additional information:

The classification as a carcinogen need not to apply because the hydrotreated light naphthenic distillates solvent present, contains less than 3 % DMSO extract as measured by IP 346 (Dir. 2001/59/EC)

Highly refined, low viscosity base oil - CAS number not supplied

4

FIRST AID MEASURES

- Inhalation:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- Skin Contact:** Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Get immediate medical attention.
- Ingestion:** Clean mouth with water. Keep respiratory tract clear.
Do NOT induce vomiting or attempt chemical neutralization. If symptoms persist, call a physician.

5

FIRE FIGHTING MEASURES

- Flash Point:** >93°C (>200°F) DP-51 liquid
- Flash Point Method:** ASTM D-56
- Autoignition Temp:** Not determined
- Lower Explosive Limit:** Propellant: 1.8% (vol.) Gas in air
- UEL:** Propellant: 9.5%(vol.) gas in air
- Suitable extinguishing agents:** Alcohol resistant foam, dry chemical, carbon dioxide

Special hazards arising from the substance or mixture: Spray can under pressure. Carbon monoxide and carbon dioxide

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit

Unsuitable extinguishing media: High volume water jet

Further information: Do not allow run-off from fire-fighting to enter drains or water courses. Use a water spray to cool fully closed containers.

6

ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- Environmental precautions:** Do not allow to enter storm sewers/ surface or ground water.

Methods and material for containment



DP-40 Spray Can

and cleaning up:

Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation..Place in a chemical waste container.

7

HANDLING AND STORAGE

Handling Precautions:

Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area or with appropriate respiratory equipment. Do not swallow. When using do not eat, drink or smoke. (See section 8)

Storage Requirements:

Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.
Keep containers upright to prevent leakage.
Containers may be hazardous when empty since residue liquid may be present

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Provide adequate ventilation for work and storage areas.

Personal Protective Equipment:

Chemical resistant gloves;
Chemical safety glasses;
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits.
Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters;
Impervious clothing.

Exposure Limits:

CAS NO.	COMPONENT	TLV(STEL)	1000 ppm	ACGIH
68476-86-8	Propane/butane	TWA	1000ppm	OSHA PEL

Highly refined, low viscosity base oil: ACGIH TLV and OSHA PEL- 5 mg/m3 (mist)

Personal Protective Equipment:

Chemical resistant gloves;
Chemical safety glasses;
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters;
Impervious clothing



General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.



DP-40 Spray Can

Do not inhale gases / fumes / aerosols.
Wash hands before breaks and at the end of work.
Avoid contact with eyes and skin.

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Red Liquid	Odor:	Liquid - Mild
Physical State:	Liquid in a spray can under pressure	Solubility:	Not soluble in water
Spec Grav./Density:	Liquid - 0.89	Flash Point:	> 93 °C (> 199 °F) (ASTM D-93), Liquid
Viscosity:	Kinematic at 37.8 °C (100 °F): 5.4 cSts (ASTM D455), liquid	Vapor Density:	> 1 @ 20 - 25 °C (68 - 77 °F) (Air = 1.0) Liquid
Boiling Point:	240°C (464°F), Liquid	Auto-Ignition Temp:	Not determined
Vapor Pressure:	< 0.1 mmHg @ 20 °C (68 °F) Liquid	UFL/LFL:	No data available
pH:	Not determined		
Evaporation Rate:	Not determined		

10

STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction under normal use.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Elevated temperatures
Materials to Avoid:	Strong Acids; Strong Bases Strong Oxidizing Agents.
Hazardous Decomposition:	Carbon oxides, sulphur oxides
Hazardous Polymerization:	Will not occur.

11

TOXICOLOGICAL INFORMATION

Risk of serious damage to eyes.
May be harmful if swallowed and enters airways.
Irritating to skin.

Acute oral toxicity: LD/50 (Rat) estimated >6000 mg/kg
Acute dermal toxicity: LD/50 (Rabbit) estimated >4000 mg/kg
Acute inhalation toxicity: 64742-47-8 LC50: >1.0 mg/l
LC50 Rat (1 hour): > 28 mg/l

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Additional toxicological information:
The product shows the following dangers according to manufacturer approved calculation methods for preparations:

STOT - single exposure: No data available
STOT - repeated exposure: No data available



DP-40 Spray Can

12

ECOLOGICAL INFORMATION

Ecotoxicity

64742-47-8 Distillates, petroleum, hydrotreated and Highly refined, low viscosity baseoil: Not toxic to aquatic organisms (fish, daphnia, algae) up to water solubility

64742-94-5 Solvent naphtha (petroleum), heavy arom.: LC50 3.6 mg/l (Oncorhynchus mykiss)

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

13

DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations

Depressurize can

Empty containers may retain product residue (liquid and/or vapor) and can be dangerous.

14

TRANSPORT INFORMATION

DOT, IATA, IMDG

UN1950, aerosols, flammable, 2.1

15

REGULATORY INFORMATION

TSCA All components are on the Inventory list

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

SARA 311/312 Hazard classes

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 313 (TRI reporting)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels.



DP-40 Spray Can

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

16

OTHER INFORMATION

NFPA: Health = 2, Fire = 4, Reactivity = 0, Specific Hazard = n/a



This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Author: Sherwin Inc.

Publication Date: June 14, 2022

Revision No. 0

Revision Date: 6/14/2022

SAFETY DATA SHEET

B67V235

Section 1. Identification

Product identifier : DURA-PLATE® 235 Multi-Purpose Epoxy (Part B) - Hardener
Product code : B67V235
Other means of identification : Not available.
Product type : Liquid.

Recommended use of the chemical and restrictions on use

Not applicable.

Supplier's details : The Sherwin-Williams Company
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number : +1 703-741-5970 (Jamaica, El Salvador, Guyana, Belize)
+(1) 868-224-5716 (Trinidad-Tobago)
e-mail address of person responsible for this SDS : sds@sherwin.com

Section 2. Hazard identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 1C
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
RESPIRATORY SENSITIZATION - Category 1
SKIN SENSITIZATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4.5%

GHS label elements

Hazard pictograms :



Signal word :

Danger

Hazard statements :

Flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Date of issue/Date of revision :

12/14/2024

Date of previous issue :

10/6/2024

Version : 6.01

1/13

SHW-A4-UN-GHS - SV

Section 2. Hazard identification

- Prevention** : Wear protective gloves, protective clothing and eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Please refer to the SDS for additional information.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	%	CAS number
Xylene, mixed isomers	≥10 - ≤26	1330-20-7
1-Butanol	≤5.4	71-36-3
2,4,6-tris(dimethylaminomethyl)phenol	≤4.7	90-72-2
Ethylbenzene	≤5	100-41-4
Ethylenediamine	≤1.2	107-15-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire,

Section 4. First aid measures

symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

Section 4. First aid measures

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.

- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Xylene, mixed isomers	ACGIH TLV (United States, 1/2024). [p-xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours.
1-Butanol	ACGIH TLV (United States, 1/2024). TWA: 20 ppm 8 hours.
Ethylbenzene	ACGIH TLV (United States, 1/2024). Ototoxicant.

Section 8. Exposure controls/personal protection

Ethylenediamine

TWA: 20 ppm 8 hours.
ACGIH TLV (United States, 1/2024).
Absorbed through skin.
 TWA: 10 ppm 8 hours.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Clear.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Not available.
Boiling point, initial boiling point, and boiling range	: 117°C (242.6°F)
Flash point	: Closed cup: 48°C (118.4°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 0.8 (butyl acetate = 1)
Flammability	: Flammable liquid.
Lower and upper explosion limit/flammability limit	: Lower: 1% Upper: 11.2%
Vapor pressure	: 0.95 kPa (7.1 mm Hg)
Relative vapor density	: 2.55 [Air = 1]
Relative density	: 0.94
Solubility(ies)	:

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): <20.5 mm ² /s (<20.5 cSt)
Flow time (ISO 2431)	: Not available.
Heat of combustion	: 12.033 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
1-Butanol	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Ethylenediamine	LD50 Oral	Rat	1200 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
1-Butanol	Eyes - Severe irritant	Rabbit	-	0.005 MI	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
2,4,6-tris (dimethylaminomethyl) phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Skin - Mild irritant	Rat	-	0.025 MI	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Severe irritant	Rat	-	0.25 MI	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Ethylenediamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Eyes - Severe irritant	Rabbit	-	750 ug	-
	Skin - Moderate irritant	Rabbit	-	450 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 10 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Section 11. Toxicological information

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
1-Butanol	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Ethylbenzene	Category 3 Category 3	-	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-
Ethylbenzene	Category 2	-	-

Aspiration hazard

Name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
wheezing and breathing difficulties
asthma
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Section 11. Toxicological information

Ingestion : Adverse symptoms may include the following:
stomach pains
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
DURA-PLATE® 235 Multi-Purpose Epoxy (Part B)	7182.2	5244.6	N/A	195.0	N/A
Xylene, mixed isomers	4300	2500	N/A	N/A	N/A
1-Butanol	2500	3400	N/A	24	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
Ethylbenzene	3500	N/A	N/A	11	N/A
Ethylenediamine	1200	300	N/A	11	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - <i>Palaemonetes pugio</i>	48 hours
1-Butanol	Acute LC50 13400 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 1983 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 1730000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
Ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
Ethylenediamine	Acute LC50 4200 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Acute EC50 100000 µg/l Fresh water	Algae - <i>Chlorella pyrenoidosa</i>	96 hours

Section 12. Ecological information

	Acute LC50 26500 µg/l Fresh water Acute LC50 115.7 mg/l Fresh water Chronic NOEC 0.16 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> Fish - <i>Pimephales promelas</i> Daphnia - <i>Daphnia magna</i>	48 hours 96 hours 21 days

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily
1-Butanol	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN3469	UN3469	UN3469
UN proper shipping name	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE
Transport hazard class(es)	3 (8) 	3 (8) 	3 (8) 
Packing group	III	III	III
Environmental hazards	No.	No.	No.

Section 14. Transport information

Additional information

IMDG : **Emergency schedules** F-E, S-C

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.
Canada	: Not determined.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory: All components are listed or exempted.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: All components are listed or exempted.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

History

Date of printing	: 12/14/2024
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Date of previous issue	: 10/6/2024
Version	: 6.01

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 1C	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method
AQUATIC HAZARD (ACUTE) - Category 2	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 14-Oct-2019

Revision Date 14-Oct-2019

Revision Number 1

1. Identification

Product identifier

Product Name Enerpac LX 70 Hydraulic Oil

Other means of identification

Product Code(s) 117

Synonyms CM50885 LX104 (Drums), LX101(Gallons)

Other information Blend Revision ID 3211

Recommended use of the chemical and restrictions on use

Recommended use Lubricant

Restrictions on use No information available.

Details of the supplier of the safety data sheet

Supplier Address

U.S. Lubricants, a Division of U.S. Venture Inc.
425 Better Way
Appleton, WI 54915
800-490-4900

Emergency telephone number

Emergency Telephone 800-490-4900
Chemtrec 1-800-424-9300 (Account# 705487)

2. Hazard(s) identification

Classification

Aspiration hazard	Category 1

Label elements

Danger

Hazard statements

May be fatal if swallowed and enters airways

**Precautionary Statements - Response****Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other information

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture**Synonyms**

CM50885 LX104 (Drums), LX101(Gallons)

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Hydrotreated heavy paraffinic petroleum distillate	64742-54-7	30-40	-	-
2,6-Di-tert-butylphenol	128-39-2	<1	-	-
Mineral oil*	-	<1	-	-
Petroleum distillates, hydrotreated light naphthenic	64742-53-6	<1	-	-

Chemical Additions

* The mineral oil contained in this material may be described by one or more of the following CAS Nos.: 64742-54-7, 64742-65-0, 64742-55-8, and 64742-56-9.

4. First-aid measures**Description of first aid measures****General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed

pulmonary edema may occur.

Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.
Skin contact	Wash skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
Ingestion	Aspiration hazard if swallowed - can enter lungs and cause damage. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	Water spray jet.
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous combustion products	Oxides of sulfur. Aldehydes. Ketones and their derivatives. Carbon monoxide. Organic compounds.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Extremely slippery when spilled. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Deny entry to unauthorized and unprotected personnel. Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

7. Handling and storage**Precautions for safe handling**

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Use personal protection equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children. Store locked up. Store away from other materials.

8. Exposure controls/personal protection**Control parameters****Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrotreated heavy paraffinic petroleum distillate 64742-54-7	TWA: 5 mg/m ³ (inhalable fraction)	-	-
Mineral oil* -	TWA: 5 mg/m ³ (inhalable fraction)	PEL: 5 mg/m ³ (mist)	REL: 5 mg/m ³ (mist) STEL: 10 mg/m ³ (mist)
Petroleum distillates, hydrotreated light naphthenic 64742-53-6	TWA: 5 mg/m ³ (inhalable fraction)	PEL: 5 mg/m ³ (mist)	REL: 5 mg/m ³ (mist) STEL: 10 mg/m ³ (mist) REL: 350 mg/m ³ Ceiling limit: 1,800 mg/m ³

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Goggles.
Hand protection	Impervious gloves. Protective gloves.

Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Light amber
Odor	Mild Petroleum
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	190.6 °C / 375.1 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.845 (7.03 lb/gal)	
Water solubility	Insoluble in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	14 - 16 cSt	@ 40 °C
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	Negligible
Liquid Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.

Skin contact Specific test data for the substance or mixture is not available. Repeated exposure may cause skin dryness or cracking.

Ingestion Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Acute toxicity

Numerical measures of toxicity
No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated heavy paraffinic petroleum distillate	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	
2,6-Di-tert-butylphenol	> 5000 mg/kg (Rat)	> 10 g/kg (Rabbit)	
Petroleum distillates, hydrotreated light naphthenic	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2180 mg/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity

The classification listed below for the petroleum distillates in this product pertains to those that contain more than 3% DMSO extract as measured by IP 346. The petroleum distillates in this product do not meet that criteria to be classified as carcinogens.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrotreated heavy paraffinic petroleum distillate 64742-54-7	A2	Group 1	Known	X
Mineral oil* -	A2	Group 1	Known	X
Petroleum distillates, hydrotreated light naphthenic 64742-53-6	A2	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrotreated heavy paraffinic petroleum distillate 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
2,6-Di-tert-butylphenol 128-39-2	-	-	-	EC50: =0.45mg/L (48h, Daphnia magna)
Mineral oil* -	-	LC 50: > 100 mg/L (4d, Fathead Minnow)	-	EC 50: > 10,000 mg/L (2d, Water flea (Daphnia magna)) EC 50: > 10 mg/L (21d, Water flea (Daphnia magna)) NOEC: > 10 mg/L (21d, Water flea (Daphnia magna))
Petroleum distillates, hydrotreated light naphthenic 64742-53-6	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status.

DSL/NDSL Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Toluene - 108-88-3	Developmental

U.S. State Right-to-Know Regulations**US State Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Petroleum distillates, hydrotreated light naphthenic 64742-53-6	-	X	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	Flammability 1	Instability 0	Physical and chemical properties -
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AELG(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Issuing Date 14-Oct-2019
Revision Date 14-Oct-2019
Revision Note Initial Release.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Version 6.14
Revision Date 09/08/2024
Print Date 09/09/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Ethylene glycol

Product Number : 324558
Brand : Sigma-Aldrich
Index-No. : 603-027-00-1
CAS-No. : 107-21-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 4), H302

Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

Sigma-Aldrich - 324558

Page 1 of 13

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard Statements

H302

Harmful if swallowed.

H373

May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Precautionary Statements

P260

Do not breathe mist or vapors.

P264

Wash skin thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P301 + P312 + P330

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P314

Get medical advice/ attention if you feel unwell.

P501

Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 1,2-Ethanediol

Formula : $C_2H_6O_2$

Molecular weight : 62.07 g/mol

CAS-No. : 107-21-1

EC-No. : 203-473-3

Index-No. : 603-027-00-1

Component	Classification	Concentration
ethylene glycol		
	Acute Tox. 4; STOT RE 2; H302, H373	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

Sigma-Aldrich - 324558

Page 2 of 13

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Hygroscopic.

Storage class

Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
ethylene glycol	107-21-1	TWA	25 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		
		STEL	50 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		
		STEL	10 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		Not classifiable as a human carcinogen		

		C	40 ppm 100 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Workers	Inhalation	Long-term local effects	35 mg/m ³
Workers	Skin contact	Long-term systemic effects	106mg/kg BW/d
Consumers	Inhalation	Long-term local effects	7 mg/m ³
Consumers	Skin contact	Long-term systemic effects	53mg/kg BW/d

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	1.53 mg/kg
Sea water	1 mg/l
Fresh water	10 mg/l
Sea sediment	3.7 mg/kg
Fresh water sediment	37 mg/kg
Sewage treatment plant	199.5 mg/l
Aquatic intermittent release	10 mg/l

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatrill® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatrill® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid Color: colorless
b) Odor	odorless
c) Odor Threshold	Not applicable
d) pH	No data available
e) Melting point/freezing point	Melting point/ range: -13 °C (9 °F)
f) Initial boiling point and boiling range	196 - 198 °C 385 - 388 °F
g) Flash point	115 °C (239 °F) - open cup
h) Evaporation rate	1
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 15.3 %(V) Lower explosion limit: 3.2 %(V)
k) Vapor pressure	1 hPa at 51.1 °C (124.0 °F)
l) Vapor density	2.14 - (Air = 1.0)
m) Density	1.113 g/mL at 25 °C (77 °F)
Relative density	No data available
n) Water solubility	completely miscible

o) Partition coefficient: n-octanol/water	log Pow: -1.36 - Bioaccumulation is not expected.
p) Autoignition temperature	412 °C (774 °F) at 1,013 hPa
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

9.2 Other safety information

Surface tension	48.4 mN/m at 20 °C (68 °F)
Relative vapor density	2.14 - (Air = 1.0)

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with:

Aluminum
perchloric acid

Risk of ignition or formation of inflammable gases or vapours with:
chromyl chloride

Strong oxidizing agents
chlorates

Peroxides
potassium permanganate

Exothermic reaction with:
chlorosulfonic acid
Sodium hydroxide
fuming sulfuric acid
sulfuric acid

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

various plastics, Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

Sigma-Aldrich - 324558

Page 7 of 13

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity estimate Oral - 500.1 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

LC50 Inhalation - Rat - male and female - 6 h - > 2.5 mg/l - aerosol

Remarks: (ECHA)

LD50 Dermal - Mouse - male and female - > 3,500 mg/kg

Remarks: (ECHA)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 20 h

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: dominant lethal test

Species: Rat

Application Route: Oral

Result: negative

Remarks: (ECHA)

Carcinogenicity

This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

- IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

Laboratory experiments have shown teratogenic effects.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Oral - May cause damage to organs through prolonged or repeated exposure.

- Kidney

Aspiration hazard

No data available

11.2 Additional Information

RTECS: KW2975000

When ingested early symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany, and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive the initial toxicity period usually develop renal failure along with brain and liver damage., Exposure to and/or consumption of alcohol may increase toxic effects.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

agitation

CNS disorders

Systemic effects:

After a latency period:

Tiredness

ataxia (impaired locomotor coordination)

Unconsciousness

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Central nervous system - Irregularities - Based on Human Evidence

Central nervous system - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish	static test LC50 - Pimephales promelas (fathead minnow) - 72,860 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test NOEC - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to fish(Chronic toxicity)	flow-through test LC50 - Menidia peninsulae (tidewater silverside) - > 1,500 mg/l - 28 d Remarks: (ECHA) The value is given in analogy to the following substances: triethylene glycol
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - Ceriodaphnia dubia (water flea) - 8,590 mg/l - 7 d (US-EPA)

12.2 Persistence and degradability

Biodegradability	aerobic - Exposure time 10 d Result: 90 - 100 % - Readily biodegradable. (OECD Test Guideline 301A)
Biochemical Oxygen Demand (BOD)	780 mg/g Remarks: (IUCLID)
Chemical Oxygen Demand (COD)	1,190 mg/g Remarks: (IUCLID)
Theoretical oxygen demand	1,290 mg/g Remarks: (IUCLID)
Ratio BOD/ThBOD	60 % Remarks: (IUCLID)

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

DOT (US)

UN number: 3082 Class: 9

Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (ethylene glycol)

Reportable Quantity (RQ): 5000 lbs

Poison Inhalation Hazard: No

IMDG

Not dangerous goods

IATA

Not dangerous goods

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ethylene glycol	107-21-1	5000	5000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

ethylene glycol 107-21-1 >= 90 - <= 100 %

US State Regulations

Massachusetts Right To Know

ethylene glycol 107-21-1

Pennsylvania Right To Know

ethylene glycol 107-21-1

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

ethylene glycol 107-21-1

Washington Chemicals of High Concern

ethylene glycol 107-21-1

California Prop. 65

WARNING: This product can expose you to chemicals including ethylene glycol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16: Other information

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.
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Revision Date: 09/08/2024

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Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : EXXSOL™ D80 FLUID

Recommended use of the chemical and restrictions on use

Recommended use : Reserved for industrial and professional use.

Supplier or Repackaging Details

Company : Univar Solutions USA
Address : 3075 Highland Pkwy Suite 200
 Downers Grove, IL 60515
 United States of America (USA)
Manufactured By : EXXONMOBIL CHEMICAL COMPANY

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)

CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
 H304 May be fatal if swallowed and enters airways.

Precautionary statements : **Prevention:**
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
 No smoking.
 P280 Wear protective gloves/ eye protection/ face protection.
Response:
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P331 Do NOT induce vomiting.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
Disposal:

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Pure substance

Hazardous components

CAS-No.	Chemical name	Weight percent
64742-47-8	Distillates (petroleum), hydrotreated light	90 - 100

Actual concentration is withheld as a trade secret

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO2)
Dry chemical
Foam
Fog
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon oxides
A complex mixture of airborne solid and liquid particulates and gases (smoke).

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

toxic fumes
Unidentified organic and inorganic compounds.
Hydrogen sulfide
sulfur oxides
Irritating fumes or substances may form.
Sulphuric acid

- Further information : For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.
Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : No smoking.
Keep in a well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64742-47-8	Distillates (petroleum), hydrotreated light	TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m ³	OSHA P0
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL
		PEL (particulate)	5 mg/m ³	CAL PEL

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : Clear, colorless

Odour : slight

Odour Threshold : No data available

pH : No data available

Freezing Point (Pour point) : -39 °C (-38 °F)

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

Boiling Point (Boiling point/boiling range)	: 207 - 237 °C (405 - 459 °F)
Flash point	: 83 °C (181 °F) Product does not sustain combustion
Evaporation rate	: 0.01 (Butyl Acetate = 1)
Flammability (solid, gas)	: No data available
Upper explosion limit	: 5.0 %(V)
Lower explosion limit	: 0.6 %(V)
Vapour pressure	: 0.01 kPa @ 20 °C (68 °F)
Relative vapour density	: 5.9
Relative density	: 0.8 @ 15.6 °C (60.1 °F) Reference substance: (water = 1)
Density	: 6.68 lb/gal @ 15.6 °C (60.1 °F)
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: > 4
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 1.7 mm ² /s @ 40 °C (104 °F) 2.5 mm ² /s @ 20 °C (68 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute dermal toxicity	: Assessment: The substance or mixture has no acute dermal

Safety Data Sheet
EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

toxicity

Components:**64742-47-8:**

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Aspiration toxicity**Components:****64742-47-8:**

May be fatal if swallowed and enters airways.

Further information**Product:**

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation): Not regulated as a dangerous good

IATA (International Air Transport Association): Not regulated as a dangerous good

IMDG-Code: Not regulated as a dangerous good

Special Notes: : Product does not sustain combustion (49 CFR 173.120.(b)(3)).

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Aspiration hazard

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

- SARA 302** : This material does not contain any components with a section 302 EHS TPQ.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

64742-47-8 Distillates (petroleum), hydrotreated light

Pennsylvania Right To Know

64742-47-8 Distillates (petroleum), hydrotreated light

- California Prop 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL
- AICS : On the inventory, or in compliance with the inventory
- NZIoC : not determined
- ENCS : On the inventory, or in compliance with the inventory
- KECI : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Safety Data Sheet

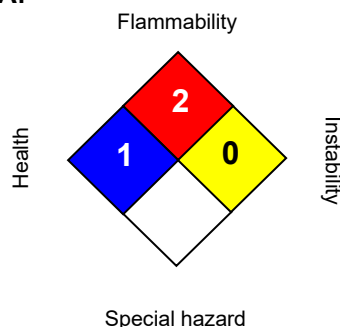
EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 05/01/2025

Material number:

16161508, 16223643, 16220899, 16207777, 16206829, 16195373, 16196133, 16194801, 16185243, 16184869, 16184355, 16175538, 16153141, 16154444, 16154730, 16156793

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing	PICCS	Philippines Inventory of Commer-

Safety Data Sheet

EXXSOL™ D80 FLUID

Version 1.4

Revision Date: 05/01/2025

	Chemical Substances		cial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

This industrial Material Safety Data Sheet is not intended for consumers and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER
MSDS Number : 200000034477
CAS-No. : Not applicable - product is a mixture
General Use : Formulated all purpose cleaner for household use.

Company : Colgate-Palmolive Co
300 Park Avenue
New York, NY 10022

Telephone : (800) 432-8226
Emergency telephone number : For emergencies involving spill, leak, fire, exposure or accident call CHEMTREC (24hr) at (800) 424-9300 or (703) 527-3887.

Medical Emergency (24HR): For MEDICAL EMERGENCIES involving this product call:
(888) 489-3861

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form : Liquid
Appearance : Purple
Odour : Characteristic

Potential Health Effects

Eye contact : Causes eye irritation on direct contact.
Skin contact : May cause skin irritation upon prolonged contact.
Inhalation : No adverse effects due to inhalation are expected.
Ingestion : May be harmful if swallowed in large quantities.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

OSHA-REGULATED COMPONENTS (present at a concentration of > or = 1%)

Chemical Name	CAS-No.	Concentration *
PROPYLENE GLYCOL PROPYL ETHER	1569-01-3	1.00 - 5.00



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

SODIUM DODECYL BENZENE SULFONATE (LINEAR)	25155-30-0	1.00 - 5.00

*All concentrations are present by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Carcinogenicity:

Listed Carcinogens: The following components, present at a concentration of > or = 0.1%, are listed as carcinogens or potential carcinogens by either the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), OSHA or ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

SECTION 4. FIRST AID MEASURES

First aid procedures

- Eye contact** : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- Skin contact** : Flush skin with large amounts of water. If irritation develops and persists, get medical attention.
- Inhalation** : Remove victim to fresh air. Get medical attention, if symptoms persist.
- Ingestion** : Drink 8 ounces of clear water. Get medical attention.

SECTION 5. FIREFIGHTING MEASURES

Flammable properties

Flash point : Remarks: no data available

Fire fighting

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

Protective equipment and precautions for firefighters

Special protective equipment for firefighters : Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protection recommended in Section 8 of the MSDS.

Methods for containment / Methods for cleaning up : Cover with inert, absorbent material and remove to disposal container. Spill area may be slippery. Flush with plenty of water.

SECTION 7. HANDLING AND STORAGE

Storage

Requirements for storage areas and containers : Store at controlled room temperature at 20-25°C (68-77°F).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Engineering Controls : In an industrial work environment, no special precautions or control measures are required.

Personal protective equipment

Protective measures : In an industrial work environment, if a splash is likely, chemical goggles may be needed. Prolonged skin contact may require protective gloves. For consumer use, no unusual precautions are necessary.

General Hygiene Considerations : In an industrial work environment, avoid eye and prolonged skin contact.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Appearance : Purple

Odour : Characteristic



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

Flash point : Note: no data available

pH : 7.0

SECTION 10. STABILITY AND REACTIVITY

Materials to avoid : Remarks: Strong oxidizing agents

Hazardous decomposition products : Note: None known.

Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

This product has not been tested as a whole. However, this formula was reviewed by expert toxicologists in the Product Safety Assurance Department of Colgate-Palmolive and is determined to be safe for its intended use. This review has taken into consideration available safety-related information including information on individual ingredients, similar formulas and potential ingredient interactions. This review is a component of the hazard determination used to prepare the statements in Section 3 of the MSDS.

SECTION 12. ECOLOGICAL INFORMATION

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water or on the ground.

SECTION 14. TRANSPORT INFORMATION

DOT : Not regulated.

TDG : Not regulated.

IATA : Not regulated.



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

IMDG : Not regulated.

SECTION 15. REGULATORY INFORMATION

US Regulations

SARA

Section 302 Extremely Hazardous
Substances (40 CFR 355, Appendix A) : FORMALDEHYDE
Sulfuric Acid

CERCLA Hazardous Substance List : 74074 lbs
(40 CFR 302.4) - Reportable Quantity
SODIUM DODECYL BENZENE SULFONATE
(LINEAR)
1666667 lbs
FORMALDEHYDE
5917160 lbs
Sulfuric Acid

Clean Air Act

Clean Air Act 111 Standards of
Performance for New Stationary
Sources : FORMALDEHYDE

Clean Water Act

Clean Water Act Section 311 : FORMALDEHYDE
Hazardous Substances (40 CFR
117.3)
Sulfuric Acid
SODIUM DODECYL BENZENE
SULFONATE (LINEAR)



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

State Regulations

Massachusetts Right-To-Know List : FORMALDEHYDE

Sulfuric Acid

SODIUM DODECYL BENZENE SULFONATE (LINEAR)

New Jersey Right-To-Know List : WATER

SODIUM DODECYL BENZENE SULFONATE (LINEAR)

PROPYLENE GLYCOL PROPYL ETHER

Lavender frag. for cleaner F-37560 (Intarome)

Pennsylvania Right-To-Know List : WATER

SODIUM DODECYL BENZENE SULFONATE (LINEAR)

Canada

Canadian Workplace Hazardous Materials Information System (WHMIS) Listed Material : SODIUM DODECYL BENZENE SULFONATE (LINEAR)

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Other Information

TSCA Section 8(b) Status : All ingredients in this product are listed on the TSCA Inventory or are not required to be listed on the TSCA Inventory.

In accordance with OSHA 29 CFR 1910.1048 formaldehyde is not listed in Section 3 of this MSDS, however, formaldehyde is regulated by State and Federal regulations at varying concentrations. State and Federal information can be found above in Section 15.

SECTION 16. OTHER INFORMATION

Further information

MSDS Number : 200000034477



FABULOSO ALL PURPOSE CLEANER LIQUID - LAVENDER

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Version 1.0

Revision Date 03/19/2013

Print Date 03/19/2013

Disclaimer: The information on this sheet is limited to the material identified and is believed by the Colgate-Palmolive Company to be correct based on its knowledge and information as of the date noted. Colgate makes no representation, guarantee or warranty, expressed or implied, as to the accuracy, reliability or completeness of the information and assumes no responsibility for injury, damage or loss resulting from the use of the material.

SAFETY DATA SHEET**Section 1: Product and Company Identification**

Product Name(s): Flexible Polyurethane Foam
Flexible Bio-Foam Polyurethane Foam

Product Use: Formed polyurethane products

Chemical Family: Cellular polyurethane; Additional CAS Registration # 9009-54-5.

Supplier: Woodbridge Foam Corporation
4240 Sherwoodtowne Blvd.
Mississauga, Ontario, Canada
L4Z 2G6

Emergency: (905) 851-3914 (9 a.m. to 5 p.m.)

Section 2: Hazards Identification

NFPA (USA)	WHMIS Classification (Canada)	Transport Symbol	Personal Protective Equipment
	Not Controlled	Not Regulated for Transportation	

Emergency Overview:

Exposure to hazardous substances is not expected when handling this product for its intended use. The polymer is essentially inert with low oral and dermal toxicity. In some workplaces, operations with this product may lead to generation of dust. Exposure to dusts may have occupational health hazards.

NOTE: The toxicological properties of this foam and certain components used in the manufacture of this foam, which may be present in the final product, have not been fully investigated. Processors and users of this product are encouraged to perform their own testing to assure this product is suitable for its intended end use(s).

Appearance, Colour and Odour: Solid cellular structure that is white to off-white natural or specified colour (e.g. black). Shade may change on exposure to air and/or ultraviolet light. Nearly odourless.

USA: This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR1910.1200).

Canada: This product is not regulated under WHMIS.

This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Section 2: Hazards Identification (continued)

Potential Health Effects: ACUTE (short term): see Section 8 for exposure controls

Relevant Route(s) of Exposure: Inhalation, Ingestion, Skin Contact, Eye contact.

Inhalation: High concentrations of airborne mist may irritate the respiratory tract and mucous membranes.

Ingestion: Ingestion is not an expected route of occupational exposure. Product may be harmful if swallowed.

Skin: No health effects expected with normal use of the product.

Eye: No health effects expected with normal use of the product.

During processing operations, airborne particulates may cause temporary irritation as a foreign object in the eye. Extreme heating of the product may release irritating vapors. Symptoms of irritation include redness, swelling, pain and blurred or hazy vision.

CHRONIC (long term): see Section 11 for additional toxicological data

No health effects expected with normal use of the product.

Medical Conditions Aggravated by Exposure: Not available

Interactions With Other Chemicals: Not applicable

Potential Environmental Effects: Not applicable

Section 3: Composition / Information on Ingredients

Hazardous Ingredients:

No hazardous ingredients by OSHA and WHMIS criteria.

Polyurethane foam is a reaction of product of toluene diisocyanate and/or methylene bisphenyl isocyanate, water, and polyols (may be polyoxyalkylene polyether polyol or polyester polyol, or bio-polyol derived from renewable resources, or a combination of the these polyols). May contain small amounts of insoluble inorganic fillers or plasticizer extenders. May contain small amounts of pigment and/or reactive dye to achieve specified colour.

Section 4: First Aid Measures

Inhalation: If symptoms are experienced, remove source of contamination or move victim to fresh air. Obtain medical advice.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes, while holding the eyelids open. Obtain medical advice.

Skin Contact: Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Flush with lukewarm, gently flowing water and non-abrasive soap for 5 minutes. Obtain medical advice.

Ingestion: Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs naturally, have victim rinse mouth with water again. Immediately obtain medical attention.

Section 5: Fire Fighting Measures

Flammable Properties:	Product will burn if strongly heated (>350°C/662°F) . Material can be ignited by an open flame or by a source of smoldering ignition, by itself or in combination with some other materials. Any reference to combustion modification or reduced burn rate refers, for the most part, to small scale laboratory tests and such ratings are not intended to reflect hazards presented by this or any other material under actual fire conditions.
Suitable extinguishing Media:	Use large volumes of water. ABC dry chemical extinguishers may be appropriate for initial control of small volumes of foam.
Unsuitable extinguishing Media:	Not available
Explosion Data:	Not explosive in its manufactured form. High concentrations of fine product dust from further processing of the foam may create an explosion hazard. Prevent accumulation of dust in work and storage areas.
Sensitivity to Mechanical Impact:	Not applicable
Sensitivity to Static Discharge:	Not available
Specific Hazards arising from the Chemical:	During a fire, burning may generate carbon monoxide, nitrogen oxides, aldehydes, organic acids, hydrocarbons, hydrogen cyanide, irritating and toxic fumes. Burning of large volumes of foam can produce dense clouds of thick, black smoke, which can make it difficult to escape from the fire area. Overheating can produce a hot, semi-liquid melt, which can produce contact blisters and release toxic and/or flammable gases or vapours. Foam may tend to melt while burning, forming a flaming, molten product, which could spread the fire. Beware of smoldering re-ignition. After extinguishing, soak completely, tear or cut foam apart and remove burned material to a safe outdoor area. CAUTION: Foam may appear to be extinguished but may be burning or smoldering internally and/or contain molten product. Do not allow smoking in areas where foams are made or stored. Check for compliance with insurance regulations, local building codes or other legal requirements.
Protective Equipment and precautions for firefighters:	As for any fire, evacuate the area and fight the fire from a safe distance. Wear a pressure-demand, self-contained breathing apparatus and full protective gear. Fight fire from a protected location or a safe distance. Any water runoff should be minimized and contained.
NFPA	
	Health: 0
	Flammability: 1
	Instability: 0

Section 6: Accidental Release Measures

Personal Precautions:	Wear adequate personal protective equipment as indicated in Section 8. Isolate spill area, preventing entry by unauthorized persons. Ventilate area of spill if there is excessive airborne dust or fume.
Environmental Precautions:	Prevent material from contaminating soil and from entering sewers or waterways.
Methods for Containment:	Stop the spill if safe to do so.
Methods for Clean-up:	Avoid dust generation. Scrape or scoop product for re-use or place a secure container for disposal.

Section 7: Handling and Storage

- Handling:** Keep away from contact with open flame and other non-processing sources of ignition. Avoid inhalation of product dust, fumes or smoke. Maintain good housekeeping. Remove accumulations of small foam pieces and/or particles on a regular basis. Appropriate local exhaust ventilation is required for all processes where fumes, smoke or dust are generated. Wash thoroughly with detergent and water after handling, before eating, drinking, smoking or using the toilet. Remove contaminated clothing and wash before reuse.
- Storage:** Keep away from contact with open flame, sparks and other heat sources. Avoid elevated storage temperatures. Maximum stacking height and minimum stacking height and minimum sprinkler head clearance may be required (refer to NFPA and FM standards). Check for compliance with insurance regulations, local building codes and other legal requirements.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

<u>Ingredient</u>	<u>ACGIH TLV</u> <u>(8-hr. TWA)</u> mg/m ³	<u>U.S. OSHA PEL</u> <u>(8-hr. TWA)</u> mg/m ³	<u>Ontario (Canada) TWAEV</u> mg/m ³
Inhalable dust	Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)	Particles (insoluble or poorly soluble) Not Otherwise Regulated (PNOR) 5 (respirable) 15 (total dust)	Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS) 3 (respirable) 10 (inhalable)

Exposure Controls

- Engineering Controls:** Provide appropriate ventilation to control dust to concentrations below the exposure guidelines.
- Personal Protection:** Follow the directions for personal protective equipment for the worksite.
- Eye/Face Protection:** During operations where dust, fume or vapour is generated, wear eye and face protection appropriate for the operation.
- Skin Protection:** When handling fresh foam and when hot processing, wear appropriate protective clothing and gloves.
- Respiratory Protection:** When dust, fume or vapor concentrations in air exceed the occupational exposure guidelines, always wear respiratory protection. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
- A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or Canadian Standards Association (CSA) Standard Z94.4-2002 must be followed whenever workplace conditions warrant a respirator's use.
- Other Protective Equipment:** A safety shower and eye-wash fountain may be required in the immediate work area.
- General Hygiene Measures:** Do not eat, drink or smoke in work areas. Wash hands thoroughly after handling this material. Maintain good housekeeping.

Section 9: Physical and Chemical Properties

Physical State:	Solid, flexible	Flash Point & method:	Not available
Appearance, Colour and Odour:	White to off-white, natural or specified colour. Nearly odourless.	Autoignition Temperature:	>350°C (662°F)
Odour Threshold:	Not available	Flammability Limits in Air:	Not available
pH:	Not applicable	Vapour Pressure: (mm Hg @ 50°C)	Not available
Specific Gravity: (water = 1)	0.02 – 0.20	Vapour Density: (Air = 1)	Not available
Partition coefficient: (n-octanol/water)	Not applicable	Evaporation Rate: (n-Butyl Acetate = 1)	Not available
Solubility:	Insoluble in water.	Boiling Point/Range:	Not available
Viscosity:	Not applicable	Melting Point:	335° - 370°C (635 – 689°F) D.T.A. decomposition

Section 10: Stability and Reactivity

Chemical Stability:	Stable
Conditions to Avoid:	Avoid heat, flame, and high temperatures.
Incompatible Materials:	Can react with strong oxidizing agents. May decompose in contact with strong acids and strong bases. Exposure to ultraviolet light may alter the colour shade. Any changes or modifications to the foam products or the addition of or combination with other materials require a re-evaluation of the potential hazards by the processor or user.
Hazardous Decomposition Products:	Combustion may generate carbon monoxide, nitrogen oxides, aldehydes, organic acids, hydrocarbons, hydrogen cyanide, dense smoke, irritating and toxic fumes.
Possibility of Hazardous Reactions:	Not applicable

Section 11: Toxicological Information

Acute Toxicity Data

<u>Ingredient</u>	<u>LD₅₀ Oral</u> (mg/kg)	<u>LD₅₀ Dermal</u> (mg/kg)	<u>LC₅₀ Inhalation (4 hrs.)</u> <u>mg/m³</u>
Polyurethane foam	Not available	Not available	Not available

Chronic Toxicity Data

Carcinogenicity:	This mixture does not contain any component that is considered a carcinogen or potential carcinogen under the definition specified by OSHA 29 CFR 1910.1200(d) (4). This mixture does not contain any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists) or NTP (National Toxicology Program).

Section 11: Toxicological Information, continued

Irritation:	During processing operations, airborne particulates may cause temporary irritation as a foreign object in the eye. Heating of the product may release irritating vapors.
Corrosivity:	Not applicable
Sensitization:	Not applicable
Neurological Effects:	Not applicable
Genetic Effects:	Not applicable
Reproductive Effects:	Not applicable
Developmental Effects:	Not applicable
Target Organ Effects:	Not applicable

Section 12: Ecological Information

Ecotoxicity:	Not available
Persistence/Degradability:	Not available
Bioaccumulation/Accumulation:	Not available
Mobility:	Not available

Section 13: Disposal Considerations

Waste Disposal Method:	This product can be recycled. Shred or bale uncontaminated waste scrap foam for recycling. Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage.
USA:	Dispose of in accordance with local, state and federal laws and regulations.
Canada:	Dispose of in accordance with local, provincial and federal laws and regulations.

Section 14: Transport Information:

U.S. Hazardous Materials Regulation (DOT 49CFR):	Not Regulated
Canadian Transportation of Dangerous Goods (TDG):	Not Regulated
ADR/RID:	Not Regulated
IMDG:	Not Regulated
Marine Pollutants:	Not applicable
ICAO/IATA:	Not Regulated

Section 15: Regulatory Information

USA

TSCA Status: Polyurethane foam meets the definition of an Article 19 CFR Section 12.120(a); 40 CFR Sections 704.3, 710.2(e) and 720.3(c).

SARA Title III

Sec. 302/304: Not available

Sec. 311/312: Not available

Sec. 313: Not available

CERCLA RQ: Not available

California Prop 65: Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification: This product is not controlled under WHMIS.
(for workplace exposures)

DSL Status: Polyurethane foam meets the definition of a manufactured item. Substances described as
(New Substance manufactured items are not subject to the regulations and are therefore excluded from
Notification Regulations) notification.

NPRI Substances: Not available
(National Pollutant Release Inventory)

Section 16: Other Information

Revision Date: September 11, 2009

Revision Summary: Previous Revision July 8, 2009
Revised Product Name in Section 1 and Composition Information in Section 3

Manufacturer Contact: Woodbridge Foam Corporation
4240 Sherwoodtowne Blvd.
Mississauga, Ontario, Canada
L4Z 2G6
Tel. 905-851-3914

Manufacturer Disclaimer: While Woodbridge Foam Corporation believes that the data set forth herein is accurate, as of the date hereof, Woodbridge makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.

**The Clorox Pet Products Company**

1221 Broadway
Oakland, CA 94612
Tel. 1-510-271-7000

Material Safety Data Sheet

I Product: FRESH STEP® EXTREME SCOOPABLE CAT LITTER - SCENTED														
Description: LIGHT AND DARK GRAY CLAY GRANULES WITH BLUE SPECKLES, GREEN SPECKLES, AND A WATERY, FLORAL ODOR														
	Distributor	Emergency Telephone Nos.												
	The Clorox Sales Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies, call 1-800-446-1014. For Transportation Emergencies, call 1-800-424-9300 (Chemtrec).												
II Health Hazard Data		III Hazardous Ingredients												
Inhalation of dust may irritate nose and throat. Cat feces can sometimes transmit a disease called toxoplasmosis. Pregnant women and immunosuppressed persons are most susceptible. Always remember to wash hands thoroughly after handling used cat litter. Unused cat litter poses no toxoplasmosis threat. Used cat litter is not recommended for use in the garden. No medical conditions are known to be aggravated by exposure to this product. FIRST AID: INHALATION: Remove to fresh air. If breathing problems develop, call a doctor. EYE CONTACT: Flush eyes with plenty of water for 15 minutes. If irritation persists, call a doctor. SKIN CONTACT: Wash skin with water. INGESTION: Drink a glassful of water. Call a doctor or poison control center.		<table><thead><tr><th><u>Ingredient</u></th><th><u>Concentration</u></th><th><u>Worker Exposure Limit</u></th></tr></thead><tbody><tr><td>Bentonite clay CAS # 1302-78-9</td><td>70 - 90%</td><td>Not established.</td></tr><tr><td>Calcium carbonate CAS # 1317-65-3</td><td>10 - 25%</td><td>10 mg/m³ - TLV-TWA^a (total dust) 15 mg/m³ - PEL-TWA^b (total dust) 5 mg/m³ - PEL-TWA^b (respirable fraction)</td></tr><tr><td>Crystalline silica (quartz) CAS # 14808-60-7</td><td>< 6%</td><td>0.05 mg/m³ - TLV-TWA^a (respirable fraction)</td></tr></tbody></table> ^a TLV-TWA = ACGIH Threshold Limit Value - Time Weighted Average ^b PEL-TWA = OSHA Permissible Exposure Limit - Time Weighted Average IARC Monographs (Volume 68, 1997) state that there is sufficient evidence of the carcinogenicity of inhaled crystalline silica (quartz) from occupational sources in humans. IARC classification - Group 1. None of the other materials in this product are on the IARC, OSHA, or NTP carcinogen lists.	<u>Ingredient</u>	<u>Concentration</u>	<u>Worker Exposure Limit</u>	Bentonite clay CAS # 1302-78-9	70 - 90%	Not established.	Calcium carbonate CAS # 1317-65-3	10 - 25%	10 mg/m ³ - TLV-TWA ^a (total dust) 15 mg/m ³ - PEL-TWA ^b (total dust) 5 mg/m ³ - PEL-TWA ^b (respirable fraction)	Crystalline silica (quartz) CAS # 14808-60-7	< 6%	0.05 mg/m ³ - TLV-TWA ^a (respirable fraction)
<u>Ingredient</u>	<u>Concentration</u>	<u>Worker Exposure Limit</u>												
Bentonite clay CAS # 1302-78-9	70 - 90%	Not established.												
Calcium carbonate CAS # 1317-65-3	10 - 25%	10 mg/m ³ - TLV-TWA ^a (total dust) 15 mg/m ³ - PEL-TWA ^b (total dust) 5 mg/m ³ - PEL-TWA ^b (respirable fraction)												
Crystalline silica (quartz) CAS # 14808-60-7	< 6%	0.05 mg/m ³ - TLV-TWA ^a (respirable fraction)												
IV Special Protection and Precautions		V Transportation and Regulatory Data												
<u>Hygienic Practices:</u> Wash hands after direct contact. <u>Engineering Controls:</u> Use general ventilation to minimize exposure to dust. <u>Personal Protective Equipment:</u> In situations where exposure limits may be exceeded, a NIOSH-approved respirator is advised. Particles may scratch hard surfaces, such as vinyl flooring. Do not use this product as a traction aid because product becomes slippery and slick when wet.		<u>DOT/IATA/IMDG:</u> Not restricted. <u>EPA - SARA Title III/CERCLA:</u> This product is regulated under Sections 311/312. This product contains no chemicals regulated under Section 313 or under Section 304/CERCLA. <u>TSCA 8(b):</u> All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing. <u>TSCA 12(b):</u> This product is not subject to TSCA 12(b) reporting requirements.												
VI Spill Procedures/Waste Disposal		VII Reactivity Data												
<u>Spill Procedures:</u> Vacuum sweep, if possible, to avoid generating airborne dust. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material. <u>Waste Disposal:</u> Reclaim, if possible, since material may be used as an absorbent for liquid spills. Otherwise, dispose of in accordance with all applicable federal, state, and local regulations.		Stable under normal use and storage conditions.												
VIII Fire and Explosion Data		IX Physical Data												
Not flammable or explosive.		Bulk density (g/cm ³).....~1.1 Solubility in water.....Insoluble												



Natural Essentials, INC.
FRAGRANCES - FLAVORS - ESSENTIAL OILS
125 Lena Drive Aurora, OH 44202
www.bulkapothecary.com
24 HOUR EMERGENCY: 1-800-728-2482
OTHER INFORMATION: 1-330-562-8022

1. PRODUCT IDENTIFICATION

Product Id: 23-0143

Product name: Germ Attack Hand Sanitizer Gel

Product/Recommended Uses: Sanitizer

2. HAZARD IDENTIFICATION

Classification:

Flammable liquids 3

Eye irritation 2A

Pictograms:



Signal word: WARNING

Hazard Statement:

H226 - Flammable liquid and vapor.

H319 - Causes serious eye irritation.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 - Keep container tightly closed.

P243 - Take precautionary measures against static discharge.

P264 - Wash skin thoroughly after handling.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P403 + P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	Percent by weight
Ethanol	64-17-5	60-80
Water	7732-18-5	20-30
Aloe Vera	85507-69-3	<1.0
Carbomer	Mixture	<1.0
Dimethicone	64365-23-7	<1.
Triisopropanolamine	122-20-3	<1.0

4.FIRST AID MEASURES

EYES: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If easy to do, remove contact lenses, if worn.

SKIN: Wash with soap and water as a precaution. Get medical attention if symptoms occur.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

INHALATION: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

5.FIREFIGHTING MEASURES

SUITABLE EXTINGUISHING MATERIAL:

Use water, Alcohol-resistant foam, dry chemical, or carbon dioxide. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

FIRE-FIGHTING PROCEDURES:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6.ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for containment/cleaning up:

Contain spillage and collect with non-combustible absorbent material. Disposal should be in accordance with all applicable local, state and federal regulations.

7. PRECAUTIONS FOR SAFE HANDLING AND USE

GENERAL:

Keep away from children. Do not get in eyes. Do not breathe vapors or mists.

VENTILATION REQUIREMENTS:

Use with local exhaust ventilation.

CONDITIONS FOR SAFE STORAGE:

Keep container(s) tightly closed and properly labeled. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Store at temperatures below 120°F.

8. EXPOSURE CONTROL / PPE

EYE PROTECTION: None required under normal conditions of use.

SKIN PROTECTION: None required under normal conditions of use.

RESPIRATORY PROTECTION: None required under normal conditions of use.

Ingredients	CAS	OSHA PEL	NIOSH REL	ACGIH TLV
Ethanol	64.17.5	1000 ppm (TWA) 1900 mg/m ³ (TWA)	1000 ppm (TWA) 1900 mg/m ³ (TWA)	1000 ppm (STEL)

9. PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE: Gel

APPEARANCE: Clear liquid

ODOR: Ethanol

SPECIFIC GRAVITY: 0.80 - 1.0

SOLUBILITY: No data available

pH: 6.5 - 8.0

VAPOR PRESSURE(mmHg @20c): No data available

VAPOR DENSITY: No data available

FLASH POINT(°C CLOSED CUP): No data available

MELTING POINT/FREEZING POINT(°C): No data available

BOILING POINT(°C): No data available

AUTO-IGNITION TEMPERATURE(°C): No data available

DECOMPOSITION TEMPERATURE(°C): No data available

EVAPORATION RATE: No data available

VISCOSITY(cP): 7000 - 15000

% VOC: No data available

10. STABILITY AND REACTIVITY

REACTIVITY: No data available

CHEMICAL STABILITY: Stable

POSSIBILITY OF HAZARDOUS REACTIONS: Flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents.

CONDITIONS TO BE AVOIDED: Heat, flames and sparks.

INCOMPATIBLE MATERIALS: Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products formed under fire conditions. - Carbon oxides.

11.TOXICOLOGICAL INFORMATION

SKIN CORROSION/IRRITATION: N/A

SERIOUS EYE DAMAGE/IRRITATION: N/A

RESPIRATORY OR SKIN SENSITIZATION: N/A

GERM CELL MUTAGENICITY: N/A

CARCINOGENICITY: Not known to be as defined by OSHA, IARC or NTP.

REPRODUCTIVE TOXICITY: N/A

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE: N/A

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE: N/A

ASPIRATION HAZARD: N/A

12.ECOLOGICAL INFORMATION

This product is safe for the environment at the concentrations predicted under normal use conditions.

13.DISPOSAL CONSIDERATIONS

WATER DISPOSAL: Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

14.TRANSPORT INFORMATION

TARIFF#: N/A

UN/NA ID# UN 1170

Proper Shipping Name: Ethanol Solution

DOT: UN 1170

HAZARD CLASS: 3

PACKING GROUP: III

IMO: N/A

IATA: N/A

15.REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

CAL PROP 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

OSHA Hazards: None/no reportable quantities.

SARA 302: None/no reportable quantities.

TSCA: All substances in this product are listed on the TSCA inventory if required.

16.ADDITIONAL INFORMATION

HMIS Classification:

Health Hazard: 2

Flammability: 3

Physical Hazards: 0

DISCLAIMER: The information contained in this Safety Data Sheet was obtained from current and reputable sources. However this data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. It is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss,

injury, damage or expense resulting from improper use of this product. Many federal and state; regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize themselves with all applicable regulations.

Legend:

ACGIH: American Conference of Governmental & Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
GHS: Globally Harmonized System of Chemical Classification and Labelling
HMIS: Hazardous Materials Identification System
IARC: International Agency for the Research of Cancer
IATA: International Air Traffic Association
IDLH: Immediately Dangerous to Life or Health
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organizations
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety & Health Administration
PEL: Permissible Exposure Limits
RCRA: Resource Conservation & Recovery Act
REL: Recommended Exposure Limits
SARA: Superfund Amendments & Reauthorization Act
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average
TCLP: Toxicity Characteristic Leaching Procedure
US: United States
VOC: Volatile Organic Compounds



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

DURING BUSINESS HOURS: (800) 966-3458 | OUTSIDE BUSINESS HOURS: (800) 420-7186

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and according to the Hazardous Products Regulation (February 11, 2015).

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Gorilla Sealant Clear (100% Silicone Sealant)

Intended Use of the Product

Sealant

Name, Address, and Telephone of the Responsible Party

Company

The Gorilla Glue Company
2101 E. Kemper Road
Cincinnati, Ohio 45241
513-271-3300

www.gorillatough.com

Emergency Telephone Number

Emergency Number : 1-800-420-7186 (Prosar)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Skin Irrit. 2 H315

Eye Irrit. 2A H319

Full text of hazard classes and H-statements : see section 16

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



GHS07

Signal Word (GHS-US/CA)

: Warning

Hazard Statements (GHS-US/CA)

: H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Precautionary Statements (GHS-US/CA)

: P102: Keep out of reach of children.

P280 - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US/CA)

No data available



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY
DURING BUSINESS HOURS: (800) 966-3458 | OUTSIDE BUSINESS HOURS: (800) 420-7186

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Silica, amorphous	(CAS No) 7631-86-9	7-13	Acute Tox. 4 (Inhalation:dust,mist), H332
Distillates, petroleum, hydrotreated middle	(CAS No) 64742-46-7	7-13	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402 Aquatic Chronic 2, H411
Silanetriol, ethyl-, triacetate	(CAS No) 17689-77-9	0.1-1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
Silanetriol, methyl-, triacetate	(CAS No) 4253-34-3	0.1-1	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318
Acetic acid	(CAS No) 64-19-7	< 0.1	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Acetic anhydride	(CAS No) 108-24-7	< 0.1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 3, H402
Benzene, 1-[(diiodomethyl)sulfonyl]-4-methyl-	(CAS No) 20018-09-1	< 0.1	Acute Tox. 3 (Inhalation), H331 Eye Dam. 1, H318 Aquatic Acute 1, H400

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

None Anticipated



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY
DURING BUSINESS HOURS: (800) 966-3458 | OUTSIDE BUSINESS HOURS: (800) 420-7186

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and according to the Hazardous Products Regulation (February 11, 2015).

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, alcohol-resistant foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions. High temperatures, water, oxidizers, and acids may cause a hazardous reaction. Hazardous reactions may occur on contact with certain chemicals. Refer to incompatible materials.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Nitrogen oxides. Silicon oxides. Hydrocarbons. Acetic acid. Irritating fumes.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Take up large spills with pump or vacuum. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Repeated or prolonged skin contact may cause dermatitis and defatting.



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and according to the Hazardous Products Regulation (February 11, 2015).

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe mist, spray, and vapors. Avoid contact with skin, eyes and clothing. Use appropriate personal protection equipment (PPE).

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Containers which are opened should be properly resealed and kept upright to prevent leakage. Protect from moisture. Store locked up.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water. Alcohols. Alkalis. Peroxides. Amines.

Specific End Use(s)

Sealant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
USA IDLH	US IDLH (mg/m ³)	3000 mg/m ³
Yukon	OEL TWA (mg/m ³)	300 particle/mL (as measured by Konimeter instrumentation) 20 mppcf (as measured by Impinger instrumentation) 2 mg/m ³ (respirable mass)
Acetic acid (64-19-7)		
Mexico	OEL TWA (mg/m ³)	25 mg/m ³
Mexico	OEL TWA (ppm)	10 ppm
Mexico	OEL STEL (mg/m ³)	37 mg/m ³
Mexico	OEL STEL (ppm)	15 ppm
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	25 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	37 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA IDLH	US IDLH (ppm)	50 ppm
Alberta	OEL STEL (mg/m ³)	37 mg/m ³
Alberta	OEL STEL (ppm)	15 ppm
Alberta	OEL TWA (mg/m ³)	25 mg/m ³
Alberta	OEL TWA (ppm)	10 ppm
British Columbia	OEL STEL (ppm)	15 ppm
British Columbia	OEL TWA (ppm)	10 ppm
Manitoba	OEL STEL (ppm)	15 ppm
Manitoba	OEL TWA (ppm)	10 ppm



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

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New Brunswick	OEL STEL (mg/m ³)	37 mg/m ³
New Brunswick	OEL STEL (ppm)	15 ppm
New Brunswick	OEL TWA (mg/m ³)	25 mg/m ³
New Brunswick	OEL TWA (ppm)	10 ppm
Newfoundland & Labrador	OEL STEL (ppm)	15 ppm
Newfoundland & Labrador	OEL TWA (ppm)	10 ppm
Nova Scotia	OEL STEL (ppm)	15 ppm
Nova Scotia	OEL TWA (ppm)	10 ppm
Nunavut	OEL STEL (ppm)	15 ppm
Nunavut	OEL TWA (ppm)	10 ppm
Northwest Territories	OEL STEL (ppm)	15 ppm
Northwest Territories	OEL TWA (ppm)	10 ppm
Ontario	OEL STEL (ppm)	15 ppm
Ontario	OEL TWA (ppm)	10 ppm
Prince Edward Island	OEL STEL (ppm)	15 ppm
Prince Edward Island	OEL TWA (ppm)	10 ppm
Québec	VECD (mg/m ³)	37 mg/m ³
Québec	VECD (ppm)	15 ppm
Québec	VEMP (mg/m ³)	25 mg/m ³
Québec	VEMP (ppm)	10 ppm
Saskatchewan	OEL STEL (ppm)	15 ppm
Saskatchewan	OEL TWA (ppm)	10 ppm
Yukon	OEL STEL (mg/m ³)	43 mg/m ³
Yukon	OEL STEL (ppm)	25 ppm
Yukon	OEL TWA (mg/m ³)	25 mg/m ³
Yukon	OEL TWA (ppm)	10 ppm
Acetic anhydride (108-24-7)		
Mexico	OEL TWA (mg/m ³)	20 mg/m ³
Mexico	OEL TWA (ppm)	5 ppm
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	3 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m ³)	20 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	20 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	200 ppm
Alberta	OEL Ceiling (mg/m ³)	21 mg/m ³
Alberta	OEL Ceiling (ppm)	5 ppm
British Columbia	OEL STEL (ppm)	3 ppm
British Columbia	OEL TWA (ppm)	1 ppm
Manitoba	OEL STEL (ppm)	3 ppm
Manitoba	OEL TWA (ppm)	1 ppm
New Brunswick	OEL TWA (mg/m ³)	21 mg/m ³
New Brunswick	OEL TWA (ppm)	5 ppm
Newfoundland & Labrador	OEL STEL (ppm)	3 ppm



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

DURING BUSINESS HOURS: (800) 966-3458 | OUTSIDE BUSINESS HOURS: (800) 420-7186

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and according to the Hazardous Products Regulation (February 11, 2015).

Newfoundland & Labrador	OEL TWA (ppm)	1 ppm
Nova Scotia	OEL STEL (ppm)	3 ppm
Nova Scotia	OEL TWA (ppm)	1 ppm
Nunavut	OEL STEL (ppm)	10 ppm
Nunavut	OEL TWA (ppm)	5 ppm
Northwest Territories	OEL STEL (ppm)	10 ppm
Northwest Territories	OEL TWA (ppm)	5 ppm
Ontario	OEL STEL (ppm)	3 ppm
Ontario	OEL TWA (ppm)	1 ppm
Prince Edward Island	OEL STEL (ppm)	3 ppm
Prince Edward Island	OEL TWA (ppm)	1 ppm
Québec	VEMP (mg/m ³)	21 mg/m ³
Québec	VEMP (ppm)	5 ppm
Saskatchewan	OEL STEL (ppm)	10 ppm
Saskatchewan	OEL TWA (ppm)	5 ppm
Yukon	OEL Ceiling (mg/m ³)	20 mg/m ³
Yukon	OEL Ceiling (ppm)	5 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: Avoid release to the environment.

Other Information: When using, do not eat, drink or smoke

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Paste
Appearance	: Clear to slightly hazy, colorless.
Odor	: Acetic acid
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

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Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.007
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions. High temperatures, water, oxidizers, and acids may cause a hazardous reaction. Hazardous reactions may occur on contact with certain chemicals. Refer to incompatible materials.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water. Alcohols. Alkalis. Peroxides. Amines.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified.

Classified based on the conditions cited in Nota N (Regulation (EC) 1272/2008, Annex VI, Part 3, Note N)

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Silica, amorphous (7631-86-9)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

FOR CHEMICAL EMERGENCY

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LC50 Inhalation Rat	> 2.2 mg/l (Exposure time: 1 h)
ATE US/CA (dust, mist)	1.50 mg/l/4h
Distillates, petroleum, hydrotreated middle (64742-46-7)	
LD50 Oral Rat	7400 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	4.6 mg/l/4h
Acetic acid (64-19-7)	
LD50 Oral Rat	3310 mg/kg
Acetic anhydride (108-24-7)	
LD50 Oral Rat	630 mg/kg
LD50 Dermal Rabbit	4000 mg/kg
LC50 Inhalation Rat	4.167 mg/l/4h
LC50 Inhalation Rat	1000 ppm/4h
ATE US/CA (dust, mist)	1.50 mg/l/4h
Silanetriol, ethyl-, triacetate (17689-77-9)	
LD50 Oral Rat	1460 mg/kg
Silanetriol, methyl-, triacetate (4253-34-3)	
LD50 Oral Rat	1437 - 1780 mg/kg
Benzene, 1-[(diiodomethyl)sulfonyl]-4-methyl- (20018-09-1)	
LD50 Dermal Rat	> 2000 mg/kg
ATE US/CA (gas)	700.00 ppmV/4h
ATE US/CA (vapors)	3.00 mg/l/4h
ATE US/CA (dust, mist)	0.50 mg/l/4h
Silica, amorphous (7631-86-9)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

Silica, amorphous (7631-86-9)	
LC50 Fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)
Distillates, petroleum, hydrotreated middle (64742-46-7)	
LC50 Fish 1	35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 Fish 2	10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Acetic acid (64-19-7)	
LC50 Fish 1	79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	65 mg/l (Exposure time: 48 h - Species: Daphnia magna [static])
LC50 Fish 2	75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Acetic anhydride (108-24-7)	
LC50 Fish 1	> 1000 mg/l (Exposure time: 96hr - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	55 mg/l
Benzene, 1-[(diiodomethyl)sulfonyl]-4-methyl- (20018-09-1)	
LC50 Fish 1	0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
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Version 1.1

FOR CHEMICAL EMERGENCY
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Persistence and Degradability

Gorilla Sealant Clear (100% Silicone Sealant)

Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Gorilla Sealant Clear (100% Silicone Sealant)

Bioaccumulative Potential	Not established.

Silica, amorphous (7631-86-9)

BCF Fish 1	(no bioaccumulation expected)

Acetic acid (64-19-7)

Log Pow	-0.31 (at 20 °C)

Acetic anhydride (108-24-7)

Log Pow	-0.27

Silanetriol, methyl-, triacetate (4253-34-3)

Log Pow	0.25 KowWin

<u>Mobility in Soil</u>	Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Gorilla Sealant Clear (100% Silicone Sealant)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

Silica, amorphous (7631-86-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates, petroleum, hydrotreated middle (64742-46-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Acetic acid (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ	5000 lb

Acetic anhydride (108-24-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
Date Issued: 01/05/2017

Version 1.1

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CERCLA RQ	5000 lb
Silanetriol, ethyl-, triacetate (17689-77-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Silanetriol, methyl-, triacetate (4253-34-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Benzene, 1-[(diiodomethyl)sulfonyl]-4-methyl- (20018-09-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
US State Regulations	
Silica, amorphous (7631-86-9)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Acetic acid (64-19-7)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Acetic anhydride (108-24-7)	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Canadian Regulations	
Silica, amorphous (7631-86-9)	
Listed on the Canadian DSL (Domestic Substances List)	
Distillates, petroleum, hydrotreated middle (64742-46-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Acetic acid (64-19-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Acetic anhydride (108-24-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Silanetriol, ethyl-, triacetate (17689-77-9)	
Listed on the Canadian DSL (Domestic Substances List)	
Silanetriol, methyl-, triacetate (4253-34-3)	
Listed on the Canadian DSL (Domestic Substances List)	
Benzene, 1-[(diiodomethyl)sulfonyl]-4-methyl- (20018-09-1)	
Listed on the Canadian DSL (Domestic Substances List)	

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 03/02/2017
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3



Safety Data Sheet – Gorilla Sealant Clear (100% Silicone Sealant)

Date Revised: 03/02/2017
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Version 1.1

FOR CHEMICAL EMERGENCY

DURING BUSINESS HOURS: (800) 966-3458 | OUTSIDE BUSINESS HOURS: (800) 420-7186

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Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

The information presented in this Safety Data Sheet was prepared by qualified personnel and to the best of our knowledge is true and accurate. The information and recommendations are furnished for this product with the understanding that the purchaser will independently determine the suitability of the product for this purpose. This data does not constitute a warranty, expressed or implied, statutory or otherwise, nor is it representation for which The Gorilla Glue Company assumes legal responsibility. The data is submitted for the user's information and consideration only. Any use of this product must be determined by the user to be in accordance with applicable federal, state, provincial and local laws and regulations.

Gorilla Glue NA GHS SDS 2015

SAFETY DATA SHEET

Heat-Flex® Hi-Temp 1200
Dark Gray
B59A226

Section 1. Identification

Product identifier : Heat-Flex® Hi-Temp 1200
Dark Gray
Product code : B59A226
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Material uses : Paint or paint related material.
: Industrial use only.

Supplier's details : The Sherwin-Williams Company
101 W. Prospect Avenue
Cleveland, OH 44115

VALSPAR PAINT (AUSTRALIA) PTY LIMITED
L3, 2 Burbank Place,
Baulkham Hills, NSW 2153

Emergency telephone number (with hours of operation) : 1-216-566-2917 (US) / +(61)290372994 (AUS)

Section 2. Hazard(s) identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms :



Signal word : DANGER

Hazard statements : Flammable liquid and vapour.
Causes serious eye irritation.
Causes skin irritation.
May be fatal if swallowed and enters airways.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapour. Wash hands thoroughly after handling.

Section 2. Hazard(s) identification

- Response** : Get medical attention if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Other hazards which do not result in classification : None known.

Section 3. Composition and ingredient information

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

Not available.

Ingredient name	% (w/w)	CAS number
Xylene, mixed isomers	10 - <30%	1330-20-7
Ethylbenzene	<10%	100-41-4
Methyl n-Amyl Ketone	<10%	110-43-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in

Section 4. First aid measures

recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 - pain or irritation
 - watering
 - redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 - irritation
 - redness
- Ingestion** : Adverse symptoms may include the following:
 - nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 - carbon dioxide
 - carbon monoxide
 - phosphorus oxides
 - halogenated compounds
 - metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Section 5. Firefighting measures

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazchem code** : Not applicable.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Avoid release to the environment.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Xylene, mixed isomers	Safe Work Australia (Australia, 4/2018). STEL: 655 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 350 mg/m ³ 8 hours. TWA: 80 ppm 8 hours.
Ethylbenzene	Safe Work Australia (Australia, 4/2018). STEL: 543 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
Methyl n-Amyl Ketone	Safe Work Australia (Australia, 4/2018). TWA: 233 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.

- Biological limit values** : There is no biological limit allocated.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Section 8. Exposure controls and personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Not available.
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 136°C (276.8°F)
- Flash point** : Closed cup: 31°C (87.8°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 0.8 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.8%
Upper: 7.9%
- Vapour pressure** : 0.95 kPa (7.1 mm Hg) [at 20°C]
- Vapour density** : 3.66 [Air = 1]
- Relative density** : 1.94
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)
- Aerosol product**
- Heat of combustion** : 6.006 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Methyl n-Amyl Ketone	LD50 Oral	Rat	1600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Ethylbenzene	Skin - Moderate irritant	Rabbit	-	100 %	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 mg	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract irritation
Methyl n-Amyl Ketone	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : No known significant effects or critical hazards.

Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	77845.42 mg/kg
Dermal	10981.8 mg/kg
Inhalation (gases)	49917.27 ppm
Inhalation (vapours)	227.93 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Ethylbenzene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
Methyl n-Amyl Ketone	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily
Methyl n-Amyl Ketone	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	low

Mobility in soil

Soil/water partition coefficient (K_{oc})	: Not available.

Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3  	3  	3 
Packing group	III	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	Hazchem code Not applicable.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code D/E	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

[Standard Uniform Schedule of Medicine and Poisons](#)

Not regulated.

[Model Work Health and Safety Regulations - Scheduled Substances](#)

Ingredient name	Schedule
crystalline silica, respirable powder	Prohibited [For abrasive blasting at a concentration of greater than 1%]

[Agricultural and Veterinary Chemicals Code Act 1994](#)

Not available.

[International regulations](#)

[Chemical Weapon Convention List Schedules I, II & III Chemicals](#)

Not listed.

[Montreal Protocol \(Annexes A, B, C, E\)](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Naphthalene POPs - Annex 3 Listed

Section 16. Any other relevant information

[History](#)

Date of printing : 10, February, 2020.

Date of issue/Date of revision : 10, February, 2020

Date of previous issue : 28, November, 2019

Version : 6

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

[Procedure used to derive the classification](#)

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 ASPIRATION HAZARD - Category 1	On basis of test data Calculation method Calculation method Calculation method Calculation method

Section 16. Any other relevant information

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become make themselves aware of and understand the data contained in this SDS and any hazards that may be associated with the product. This information is provided in good faith and believed to be accurate as of the effective date mentioned herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can may change later the composition, hazards and risks of the product. Products shall should not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to, the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for the use of the product are not under the manufacturer's control of the manufacturer; the customer/buyer/user is responsible to for determine determining the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS, without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be held responsible for SDSs obtained from any other source.

End of SDS



Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

SDS No. 8957
EU/CLP GHS

Synonyms: Valvoline Product Code 52670413

*** Section 1 - Product and Company Identification ***

Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS
Emergency # 800-424-9300 CHEMTREC
www.hess.com (Environment, Health, Safety Internet Website)

*** Section 2 - Hazards Identification ***

GHS Classification:

Skin Corrosion/Irritation – Category 2
Specific Target Organ Toxicity – Category 3 (narcosis)
Carcinogenicity - Category 1B

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

WARNING

Hazard Statements

Causes skin irritation.
May cause cancer.
May cause drowsiness or dizziness.

Precautionary Statements

Prevention

Wash hands and forearms thoroughly after handling.
Wear protective gloves/protective clothing/eye protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing fume/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.

Response

If on skin: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
If exposed or concerned: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep in a position comfortable for breathing. Call poison center or doctor if you feel unwell.

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Storage

Store locked up.

Store in a well-ventilated place.

Keep container tightly closed.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
64742-65-0	Petroleum distillates, solvent dewaxed heavy paraffinic	83-93

Petroleum-based lubricating oil with detergent/dispersant engine oil package with zinc compounds.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is visual difficulty, seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

First Aid: Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

First Aid: Notes to Physician

Acute aspiration of large amounts of oil-laden material may produce a serious aspiration hazard. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of mineral oil can produce chronic inflammation of the lungs (i.e. lipid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. No special fire hazards are known to be associated with this product. Dense smoke may be generated while burning.

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Hazardous Combustion Products

May form: carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorous, various hydrocarbons.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

SMALL SPILL: Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

LARGE SPILL: Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify authorities as required, that a spill has occurred. Persons not wearing proper personal protective equipment should be excluded from area of spill until clean-up has been completed.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

*** Section 7 - Handling and Storage ***

Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents.

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Incompatibilities

Avoid contact with: acids, halogens, strong oxidizing agents.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

The EU, ACGIH, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom have not developed exposure limits for any of this product's components.

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Wear normal work clothing covering arms and legs.

Hygiene Measures

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Dry, clear and bright	Odor:	None
Physical State:	Liquid	pH:	ND
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	>425 °F (218.3°C) @ 760.00 mmHg	Melting Point:	ND
Solubility (H2O):	Negligible	Specific Gravity:	0.881 @ 60°F (16°C)
Evaporation Rate:	Slower than ethyl ether	VOC:	ND
Viscosity:	<= 3300.0 cps @ -20°C; 10.0 - 11.0 cst @ 100°C	Octanol/H2O Coeff.:	ND
Flash Point:	430 °F (221.1 °C)	Flash Point Method:	COC
Upper Flammability Limit (UFL):	ND	Lower Flammability Limit (LFL):	ND
Burning Rate:	ND	Auto Ignition:	ND

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None

Incompatible Products

Avoid contact with: acids, halogens, strong oxidizing agents.

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Hazardous Decomposition Products

May form: aldehydes, carbon dioxide and carbon monoxide, hydrogen sulfide, oxides of sulfur, nitrogen and phosphorus, toxic fumes, various hydrocarbons.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if large amounts are swallowed.

B: Component Analysis - LD50/LC50

Petroleum distillates, solvent dewaxed heavy paraffinic (64742-65-0)

Inhalation LC50 Rat >4.7 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >5000 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms include redness, burning, drying and cracking of the skin, and skin burns. Additional symptoms of skin contact include: acne. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Potential Health Effects: Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Potential Health Effects: Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

May cause cancer.

Used motor oil has been shown to cause skin cancer in laboratory animal continually exposed by repeated applications.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

Acute aspiration of large amounts of oil-laden material may produce a serious aspiration hazard.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Petroleum distillates, solvent dewaxed heavy paraffinic (64742-65-0)

Test & Species

Conditions

96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L
48 Hr EC50 Daphnia magna	>1000 mg/L

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

*** Section 13 - Disposal Considerations ***

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

*** Section 14 - Transportation Information ***

IATA Information

Shipping Name: Not Regulated

ICAO Information

Shipping Name: Not Regulated

IMDG Information

Shipping Name: Not Regulated

Safety Data Sheet

Material Name: Hess 10W30 Motor Oil

*** Section 15 - Regulatory Information ***

Regulatory Information

Component Analysis - Inventory

Component	EC #	TSCA	CAN	EEC
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	265-169-7	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet



Revision date: Initial version
Date of issue: 04.24.2015

Page: 1/10

Trade name:	Aqua-Gel® II Utility Cable Pulling Lubricant

SECTION 1: Identification

Product identifier:	Aqua-Gel® II Utility Cable Pulling Lubricant.
Synonyms:	None available.
Product Code Number:	31-378, 31-371, 31-375, 31-3855.
SDS number:	ID001
Recommended use:	Wire Pulling Lubricant.
Recommended restrictions:	None known.

Manufacturer/Importer/Supplier/Distributor information:

Company Name:	IDEAL INDUSTRIES, INC.
Company Address:	Becker Place, Sycamore, IL 60178
Company Telephone:	Office hours (Mon – Fri) 7AM - 5 PM (CDT) (815)895-5181
Company Contact Name:	Darryl Docter.
Company Contact Email:	IDEAL@IDEALINDUSTRIES.COM
Emergency phone number:	24 HOUR EMERGENCY NUMBER: (815)895-5181.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Not classified as a physical hazard under GHS criteria

Health hazards

Skin corrosion/irritation, Category 2.

Serious eye damage/eye irritation, Category 2.

Environmental hazards

Not classified as a physical hazard under GHS criteria.

GHS Signal word:	WARNING.

GHS Hazard statement(s):	Causes skin irritation. Causes serious eye irritation.

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

P264 - Wash skin thoroughly after handling.
P280 - Wear protective gloves/eye protection/face protection.

Response:

P302+P352 – If on skin: Wash with plenty of soap and water.
P305 + P351 + P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash before reuse.

Storage:

No storage precautionary statements.

Disposal:

No disposal precautionary statements.

**Hazard(s) not otherwise
Classified (HNOC):**

None known.

Percentage of ingredient(s) of unknown acute toxicity:
Not applicable.

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
Potassium Hydroxide (20% solution)	1310-58-3	< 2%

Note: The balance of the ingredients are not classified as hazardous or below the threshold concentration, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Description of necessary measures:

Inhalation: Obtain medical attention if there are signs of breathing difficulties.

Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and thoroughly clean before reuse.

Eye contact: Flush eyes with water for at least 15 minutes, occasionally lifting eyelids. If pain or redness persists after flushing, obtain medical attention.

Ingestion: Do not induce vomiting. Consult physician or local poison control center.

Most important symptoms/effects, acute and delayed: Causes skin irritation. Causes serious eye irritation.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Not flammable. Use extinguishing media suitable for surrounding materials.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens. This condition is unlikely to occur.
Combustion products - Carbon monoxide, Carbon dioxide.

Special protective equipment and precautions for fire-fighters: For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Stay upwind and away from spill/release. For large spillages, notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and material for containment and cleaning up:

Persons not wearing protective equipment should be excluded from area of spill until cleanup has been completed. Stop spill at source, wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required.

SECTION 7: Handling and Storage

Precautions for safe handling: Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Conditions for safe storage, including any incompatibles: Store at temperatures between 40 - 180°F. Avoid freezing. Keep away from children, infants and pets. Keep container(s) tightly closed and properly labeled. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	PEL-TWA (8 hour)	PEL-STEL (15 min)
Potassium Hydroxide	No data available	No data available

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
Potassium Hydroxide	2 mg/m ³ Ceiling	No data available

NIOSH Exposure Limits		
Substance	TWA	STEL
Potassium Hydroxide	2 mg/m ³ Ceiling	No data available

Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is suggested at points where vapors can be expected to escape to the workplace air or in enclosed areas.

Individual protection measures, such as personal protective equipment:

Eye/face protection: None normally required, but the use of OSHA compliant safety glasses or splash goggles recommended.

Skin and Hand protection: None normally needed -Neoprene if necessary. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: None normally required.

Other: Eye wash / eye bath in the work area is recommended but not necessary.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Gel
Form:	Clear gel.
Color:	Blue.
Odor:	Mild odor.
Odor threshold:	No data available
pH:	6.5 – 8.0
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	100°C (212°F)
Flash point:	None
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	No data available
Flammability limit – upper (%):	No data available
Explosive limit – lower (%):	No data available
Explosive limit – upper (%):	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density:	0.9930-1.0330
Solubility(ies):	Infinite.
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	20000-40000 cps

Other information:

% Volatile by volume:	< 90%
Percent solids by weight:	~10

SECTION 10: Stability and Reactivity

Reactivity:	Not chemically reactive.
Chemical stability:	Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions:	Hazardous reactions not anticipated.
Conditions to avoid:	Avoid prolonged storage at temperatures exceeding 190°F. Extreme temperatures of combustion or burning and contact with nitrites could result in the formation of nitrosamines which are potential carcinogens. This condition is unlikely to occur.
Incompatible materials:	Avoid contact with strong oxidizers and nitrites.
Hazardous decomposition Products:	In the unlikely event of combustion of dried residue, oxides and nitrogen may be released.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation:	Not an expected route of entry.
Ingestion:	Not an expected route of entry.
Skin:	May produce skin irritation.
Eyes:	Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:

Upon prolonged contact, may cause temporary eye discomfort.

Delayed and immediate effects and chronic effects from short or long-term exposure:

Detailed below.

Numerical measures of toxicity:

Ingredient Information:

Substance	Test Type (species)	Value
Potassium hydroxide	LD ₅₀ Oral (Rat)	273 mg/kg
	LD ₅₀ Dermal (Rabbit)	No data available
	LC ₅₀ Inhalation (Rat)	No data available

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation:	This material may cause skin irritation.

Serious eye damage/eye irritation:	Upon prolonged contact, may cause temporary eye discomfort.
Respiratory sensitization:	No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).
Skin sensitization:	No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).
Germ cell mutagenicity:	No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).
Carcinogenicity:	No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.
Reproductive toxicity:	No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).
Specific target organ toxicity- Single exposure:	No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).
Specific target organ toxicity- Repeat exposure:	No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).
Aspiration hazard:	No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).

Further information: No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Potassium hydroxide	LC ₅₀	Fish - Gambusia affinis (Mosquito fish)	85 mg/l (24h)
	LC ₅₀	Aquatic crustacea	No data available
	EC ₅₀	Algae	No data available

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

SECTION 14: Transport Information

DOT: This material is not classified as dangerous under DOT regulations.

IATA: This material is not classified as dangerous under IATA regulations.

IMDG: This material is not classified as dangerous under IMDG regulations.

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:

Component	Reportable Quantity
Potassium Hydroxide	1000 lbs

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: Yes

Chronic Health Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):

None

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: No components are listed on Prop 65.

Massachusetts Right to Know: Potassium hydroxide is listed on the Massachusetts Right to Know List.

Minnesota Hazardous Substance List: None of the components are listed on the Minnesota Hazardous Substance List.

New Jersey Right to Know: Potassium hydroxide is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Potassium hydroxide is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: D2B - Toxic Material

SECTION 16: Other information, including date of preparation or last revision.

Revision Date: April 24, 2015

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SAFETY DATA SHEET

INTERCURE 4500 BASE LIGHT PART A

Section 1. Identification

GHS product identifier : INTERCURE 4500 BASE LIGHT PART A
SDS code : AGA011

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Professional use Industrial use
Uses advised against
All other uses

Product use : Two component solvent borne coating for exterior use.

Supplier's details

Akzo Nobel Coatings
 International Paint LLC
 6001 Antoine Drive
 Houston, Texas 77091
 International Paint 1-800-589-1267
 International Paint (International) 1-713-682-1711
 Akzo Nobel Coatings Ltd.
 110 Woodbine Downs Blvd.
 Unit #4 Etobicoke, Ontario
 Canada M9W 5S6
 International Paint (International) 1-713-682-1711

Cía. Mexicana de Pinturas International, S.A. de C.V.
 Carretera Anillo Periférico, No Ext 205,
 No Interior A, Colonia HDA S JOSE, Garcia
 Garcia, CP 66000, Nuevo Leon.

Emergency telephone number (with hours of operation) : CHEMTREC (USA) +1 (800) 424-9300 (24Hr)
 CHEMTREC (International) +1 (703) 527-3887
 Domestic Poison Control Center Customer Service +1 (800) 854-6813

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Date of issue/Date of revision : 7/10/2024
Date of previous issue : 7/12/2023

Version : 2.02
 1/16

Section 2. Hazards identification

Hazard statements : Flammable liquid and vapor.
May cause an allergic skin reaction.
May cause cancer.
Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace.

Response : IF exposed or concerned: Get medical advice or attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national or international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Alc , not containing asbestiform fibres	≥25 - ≤50	14807-96-6
tetraethyl N, N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate	≥10 - ≤25	136210-30-5
titanium dioxide	≥10 - ≤25	13463-67-7
Solvent naphtha (petroleum), light arom.	≤10	64742-95-6
1,2,4-trimethylbenzene	≤6.5	95-63-6
Zeolites	≤10	1318-02-1
silicon dioxide	≤3	7631-86-9
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	≤1	41556-26-7
cumene	≤0.3	98-82-8
Crystalline Silica, respirable part in whole product, <10µm	≤0.3	14808-60-7
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	≤0.3	82919-37-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easy to do. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

Section 4. First aid measures

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.

- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
alc, not containing asbestiform fibres tetraethylN,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate titanium dioxide Solvent naphtha (petroleum), light arom. 1,2,4-trimethylbenzene	None. None. OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles None. NIOSH REL (United States, 10/2020). TWA: 125 mg/m³ 10 hours. TWA: 25 ppm 10 hours. OSHA PEL 1989 (United States, 3/1989).

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5/16

Section 8. Exposure controls/personal protection

Zeolites
silicon dioxide
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
cumene

Crystalline Silica, respirable part in whole product, <10µm

methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

[Trimethyl benzene]
TWA: 125 mg/m³ 8 hours.
TWA: 25 ppm 8 hours.
ACGIH TLV (United States, 1/2022).
TWA: 10 ppm 8 hours.
None.
None.
None.
ACGIH TLV (United States, 1/2022). Notes: 1999 Adoption.
TWA: 5 ppm 8 hours.
NIOSH REL (United States, 10/2020).
Absorbed through skin.
TWA: 245 mg/m³ 10 hours.
TWA: 50 ppm 10 hours.
OSHA PEL (United States, 5/2018).
Absorbed through skin.
TWA: 245 mg/m³ 8 hours.
TWA: 50 ppm 8 hours.
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin.
TWA: 245 mg/m³ 8 hours.
TWA: 50 ppm 8 hours.
OSHA PEL Z3 (United States, 6/2016).
TWA: 250 mppcf / (%SiO₂+5) 8 hours. Form: Respirable
TWA: 10 mg/m³ / (%SiO₂+2) 8 hours. Form: Respirable
OSHA PEL (United States, 5/2018). [Silica, crystalline]
TWA: 50 µg/m³ 8 hours. Form: Respirable dust
OSHA PEL 1989 (United States, 3/1989).
Notes: as quartz
TWA: 0.1 mg/m³, (as quartz) 8 hours. Form: Respirable dust
ACGIH TLV (United States, 1/2022). [Silica, crystalline] Notes: Respirable fraction; see Appendix C, paragraph C.
TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction
NIOSH REL (United States, 10/2020).
[SILICA, CRYSTALLINE] Notes: See Appendix A - NIOSH Potential Occupational Carcinogen
TWA: 0.05 mg/m³ 10 hours. Form: respirable dust
None.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 8. Exposure controls/personal protection

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Wear a respirator conforming to EN140 with type A/P2 filter or better. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : White.
- Odor** : Solvent.
- Odor threshold** : Not available.
- pH** : Not available. [DIN EN 1262]
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : 135°C (275°F)
- Flash point** : Closed cup: 50°C (122°F) [Pensky-Martens]
- Flammability** : Not available.
- Lower and upper explosion limit** : Greatest known range: Lower: 1.4% Upper: 7.6% (Solvent naphtha (petroleum), light arom.)
- Vapor pressure** :

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
1,2,4-trimethylbenzene	2.25	0.3				
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	0.000014	0.0000019	EU A.4	0.00009	0.000012	EU A.4

Relative vapor density : Not available.

Density : 0.563 g/cm³ [DIN EN ISO 2811-1]

Solubility(ies) :

Media	Result
Cold water	Not soluble [OECD (TG 105)]

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Solvent naphtha (petroleum), light arom.	280 to 470	536 to 878	
tetraethylN,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	375	707	EU A.15
1,2,4-trimethylbenzene	500	932	

Decomposition temperature : Not available.

Viscosity : Kinematic (room temperature): 102 mm²/s (102 cSt) [DIN EN ISO 3219]
Kinematic (40°C (104°F)): 160 mm²/s (160 cSt) [DIN EN ISO 3219]

Particle characteristics

Median particle size : Not applicable.

Percentage of particles with aerodynamic diameter ≤ 10 µm : 0

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
✓ Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
cumene	LC50 Inhalation Vapor	Mouse	15300 mg/m ³	2 hours
	LC50 Inhalation Vapor	Mouse	10 g/m ³	7 hours
	LC50 Inhalation Vapor	Mouse	10000 mg/m ³	7 hours
	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12300 uL/kg	-
	LD50 Oral	Mouse	12750 mg/kg	-
	LD50 Oral	Rat	2.9 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
✓ Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 UI	-
silicon dioxide	Eyes - Mild irritant	Rabbit	-	24 hours 25 mg	-
cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
✓alc , not containing asbestiform fibres	-	3	-
titanium dioxide	-	2B	-
Zeolites	-	3	-
silicon dioxide	-	3	-
cumene	-	2B	Reasonably anticipated to be a human carcinogen.
Crystalline Silica, respirable part in whole product, <10µm	-	1	Known to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), light arom.	Category 3	-	Respiratory tract irritation
1,2,4-trimethylbenzene	Category 3	-	Narcotic effects
cumene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Crystalline Silica, respirable part in whole product, <10µm	Category 1	inhalation	lungs

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), light arom. cumene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
Ingestion : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Section 11. Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Product as-supplied	N/A	N/A	N/A	270.6	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide 1,2,4-trimethylbenzene Zeolites cumene	Acute LC50 >1000 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 17000 µg/l Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pecteniscrus - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 22.4 mg/l Fresh water	Fish - Tilapia zillii	96 hours
	Chronic NOEC 200000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 200000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 7.4 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 7.5 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 10.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute EC50 10.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute EC50 11.2 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 7.4 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute LC50 8 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute LC50 20.3 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 20.3 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 6320 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 5100 µg/l Fresh water	Fish - Poecilia reticulata	96 hours

Section 12. Ecological information

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
TetraethylN,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	5.16	0.25	low
Solvent naphtha (petroleum), light arom.	-	10 to 2500	high
1,2,4-trimethylbenzene	3.63	243	low
Zeolites	-	0.59 to 0.95	low
cumene	3.55	35.48	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

The information provided in section 14 is based on a bulk package shipment via ground transport in North America. All shippers are responsible for ensuring the proper transportation classification and package/container requirements are followed for the relevant mode of transport.

	DOT Classification	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	No.	No.

Additional information

- DOT Classification** : This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.
Reportable quantity 18580.5 lbs / 8435.5 kg [1425.7 gal / 5397 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- IMDG** : **Emergency schedules** F-E, _S-E_
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Transport in bulk according to IMO instruments** : Not available.

Section 15. Regulatory information

- U.S. Federal regulations** : **TSCA 5(a)2 final significant new use rules:** No products found.
TSCA 5(e) substance consent order: No products found.
TSCA 8(a) PAIR: 2-methoxy-1-methylethyl acetate; octamethylcyclotetrasiloxane; decamethylcyclopentasiloxane; dodecamethylcyclohexasiloxane; octamethylcyclotetrasiloxane
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are active or exempted.
Clean Water Act (CWA) 311: xylene; Phosphoric acid
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304**Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.**SARA 311/312**

Classification : FLAMMABLE LIQUIDS - Category 3
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 1A
 TOXIC TO REPRODUCTION - Category 2

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Classification
 Tetraethyl N, N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate titanium dioxide Solvent naphtha (petroleum), light arom.	≥10 - ≤25 ≥10 - ≤25 ≤10	SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
1,2,4-trimethylbenzene	≤6.5	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate cumene	≤1 ≤0.3	SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2 FLAMMABLE LIQUIDS - Category 3 CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
Crystalline Silica, respirable part in whole product, <10µm	≤0.3	CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	≤0.3	SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	 1,2,4-trimethylbenzene	95-63-6	≤6.5
	cumene	98-82-8	≤0.3
Supplier notification	 1,2,4-trimethylbenzene	95-63-6	≤6.5
	cumene	98-82-8	≤0.3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: The following components are listed: TALC; TITANIUM DIOXIDE; PSEUDOCUMENE; DIATOMACEOUS EARTH
New York	: None of the components are listed.
New Jersey	: The following components are listed: TALC (NOT CONTAINING ASBESTOS FIBERS); TITANIUM DIOXIDE; PSEUDOCUMENE; SILICA, QUARTZ
Pennsylvania	: The following components are listed: TALC; TITANIUM OXIDE; PSEUDOCUMENE; SILICA

California Prop. 65

 **WARNING:** Cancer - www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level	Type of toxicity
 Titanium dioxide	-	-	Cancer
cumene	-	-	Cancer
Crystalline Silica, respirable part in whole product, <10µm	-	-	Cancer
Crystalline Silica as quartz not respirable, >10µm	-	-	Cancer

Section 15. Regulatory information

Inventory list

Australia	: Not determined.
Canada	: At least one component is not listed.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory : Not determined.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method

History

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Date of issue/ Date of revision	: 7/10/2024
Date of previous issue	: 7/12/2023
Version	: 2.02
Unique ID	: 7E46AA28D30B1EDF8FDEB27DA565C867
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use

Date of issue/Date of revision	: 7/10/2024	Version	: 2.02
Date of previous issue	: 7/12/2023		15/16

Section 16. Other information

and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Unless we have agreed to the contrary, all products are supplied by us subject to our standard terms and conditions of business, which include limitations of liability. Please make sure to refer to these and / or the relevant agreement which you have with AkzoNobel (or its affiliate, as the case may be).

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Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

1. Identification

1.1. Product identifier

Product Identity Isopropyl Alcohol 91%

Alternate Names Product Code: 004

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.

Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Hydrox Laboratories
825 Tollgate Rd.
Elgin, IL 60123

Emergency

24 hour Emergency Telephone No. 800-255-3924

Customer Service: Hydrox Laboratories 847-468-9400

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 2;H225	Highly Flammable liquid and vapor.
Eye Irrit. 2;H319	Causes serious eye irritation.
STOT SE 3;H336	May cause drowsiness or dizziness.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

(Not required on OTC product or case labels per Occupational Safety and Health Standards 29 CFR 1910.1200(b)(5))



Danger



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P235 Keep cool.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Isopropyl Alcohol	75 - 100	Flam. Liq. 2;H225	[1][2]



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

CAS Number: 0000067-63-0	Eye Irrit. 2;H319 STOT SE 3;H336

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Signs and Symptoms of Exposure: Giddiness, headache, dizziness and nausea. Health Hazards (Acute and Chronic): Generally used as a rubdown. Vapor irritates eyes. High concentration of vapor can irritate respiratory tract, is anesthetic and may cause CNS depression. Medical Conditions Generally Aggravated by Exposure: Pre-existing and respiratory disorders, may be aggravated by exposure. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.
Inhalation	May cause drowsiness or dizziness.
Eyes	Causes serious eye irritation.



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water fog.
Do not use: water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Burning may produce carbon monoxide and carbon dioxide contamination.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Dilution of burning liquid with water will affect extinguishment.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Eliminate all sources of ignition. Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal.

7. Handling and storage

7.1. Precautions for safe handling



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

Do not take internally. Flammable liquid.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Anhydride, isocyanate, monomer and organo-metallic.

Keep away from heat, sparks and open flames. Keep container closed.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	TWA 400 ppm (980 mg/m ³) STEL 500 ppm
		ACGIH	TWA: 200 ppm STEL: 400 ppm Revised 2003,
		NIOSH	TWA 400 ppm (980 mg/m ³) ST 500 ppm (1225 mg/m ³)
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-63-0	Isopropyl Alcohol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Chemical resistant goggles

Skin

Rubber or vinyl gloves

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Eye bath and safety shower. Use good personal hygiene practices. Wash hands before



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Colorless Liquid
Odor	Characteristic
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	-32 to -50 C
Initial boiling point and boiling range	Not Measured
Flash Point	Approx. 57 F - TCC
Evaporation rate (Ether = 1)	1.7 (Butyl Acetate = 1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 2.0 Upper Explosive Limit: 12.0
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	0.800 - 0.833 @ 20C
Solubility in Water	Complete
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Isopropyl Alcohol Assay	85% - 96%

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

No data available.

10.4. Conditions to avoid

Avoid heat, sparks and open flame.

10.5. Incompatible materials

Anhydride, isocyanate, monomer and organo-metallic.

10.6. Hazardous decomposition products

Burning may produce carbon monoxide and carbon dioxide contamination.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Isopropyl Alcohol - (67-63-0)	4,710.00, Rat - Category: 5	12,800.00, Rat - Category: NA	72.60, Rat - Category: NA	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	3	May cause drowsiness or dizziness.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Isopropyl Alcohol - (67-63-0)	1,400.00, <i>Lepomis macrochirus</i>	100.00, <i>Daphnia magna</i>	100.00 (72 hr), <i>Scenedesmus subspicatus</i>

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

14. Transport information

See Bill-of-Lading.

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification B2 D2B

US EPA Tier II Hazards

Fire: Yes

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs: No chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous: No chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Isopropyl Alcohol

Proposition 65 - Carcinogens (>0.0%): No chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%): No chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%): No chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%): No chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Isopropyl Alcohol

Pennsylvania RTK Substances (>1%):

Isopropyl Alcohol

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our



Safety Data Sheet Isopropyl Alcohol 91%

SDS Revision Date:

10/19/2015

products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

Disclaimer: The contents of this MSDS are believed to be correct but do not purport to be all-inclusive and should only be used as a guide. Hydrox Laboratories, Inc. disclaims any express or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental or consequential damages resulting from the reliance on the above information.

End of Document

KO-17 Spray Can

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: KO-17 Spray Can
SDS Number: KO-17 SC
Revision Date: 6/14/2022
Product Use: NDT Inspection Visple Penetrant, Methods A nd C

Supplier Details: Sherwin Inc.
 5530 Borwick Avenue
 South Gate, CA 90280

Phone: 562-861-6324
Email: sherwin@sherwininc.com
Internet: www.sherwininc.com

Emergency telephone number:

ChemTel 1-800-255-3924 in U.S.A, Canada, Puerto Rico and US Virgin Islands;
 ChemTel +1-813-248-0585 outside U.S.A, Canada, Puerto Rico and US Virgin Islands
 ChemTel Brazil: 0-800-591-6042, China: 400-120-0751, India: 000-800-100-4086 and Mexico: 01-800-099-0731

2 HAZARDS IDENTIFICATION

Classification of Substance

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 1
 Physical, Flammable Aerosols, 1
 Health, Skin corrosion/irritation, 2
 Health, Reproductive toxicity, 2
 Health, Specific target organ toxicity - Repeated exposure, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H318 - Causes serious eye damage
 H222 - Extremely flammable aerosol
 H229 - Pressurized container: may burst if heated
 H315 - Causes skin irritation
 H361 - Suspected of damaging fertility or the unborn child - 2-Naphthalenol, 1-[2-[4-(2-phenyldiazenyl)phenyl]diazenyl]-, ar-heptyl ar',ar''-Me derivs. None of the ingredients are listed as carcinogenic by IARC, NTP or OSHA-Ca
 H373 - May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)- 2-Naphthalenol, 1-[2-[4-(2-phenyldiazenyl)phenyl]diazenyl]-, ar-heptyl ar',ar''-Me derivs.

GHS Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 - Wash ... thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P281 - Use personal protective equipment as required.
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.
 P302 + P352 - IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.



KO-17 Spray Can

Continue rinsing.

P308 + P311 - IF exposed or concerned: Call a POISON CENTER/doctor/...

P370 + P378 - In case of fire: Use dry chemical, alcohol resistant foam or dry sand to extinguish.

P403 + P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Ingredients:	
	%	Chemical Name:
68476-86-8	40-50%	Propane/ Isobutane
84133-50-6	10-30%	Alcohols, C12-14-secondary, ethoxylated
64742-53-6	<3%	Distillates (petroleum), hydrotreated light naphthenic
92257-31-3	<3%	2-Naphthalenol, 1-[2-[4-(2-phenyldiazenyl)phenyl]diazenyl]-, ar-heptyl ar',ar"-Me derivs.

4 FIRST AID MEASURES

Inhalation:	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
Skin Contact:	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids to facilitate irrigation. Get immediate medical attention.
Ingestion:	Clean mouth with water. Keep respiratory tract clear. Do NOT induce vomiting or attempt chemical neutralization. If symptoms persist, call a physician.

5 FIRE FIGHTING MEASURES

Flash Point:	>93°C (>200°F), liquid
Flash Point Method:	ASTM D-56
Autoignition Temp:	Not determined
Lower Explosive Limit:	Propellant: 1.8% (vol.) Gas in air
UEL:	Propellant: 9.5%(vol.) gas in air
Suitable extinguishing agents:	Alcohol resistant foam, dry chemical, carbon dioxide

Special hazards arising from the substance or mixture: Spray can under pressure. Carbon monoxide and carbon dioxide

Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit

Unsuitable extinguishing media: High volume water jet

Further information: Do not allow run-off from fire-fighting to enter drains or water courses. Use a water spray to cool fully closed containers.

6 ACCIDENTAL RELEASE MEASURES



KO-17 Spray Can

Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Environmental precautions: Do not allow to enter storm sewers/ surface or ground water.

Methods and material for containment and cleaning up:
Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation..Place in a chemical waste container.

7

HANDLING AND STORAGE

Handling Precautions: Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area or with appropriate respiratory equipment. Do not swallow. When using do not eat, drink or smoke. (See section 8)

Storage Requirements: Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep containers upright to prevent leakage. Containers may be hazardous when empty since residue liquid may be present

8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide adequate ventilation for work and storage areas.

Personal Protective Equipment: Chemical resistant gloves;
Chemical safety glasses;
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits.
Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters;
Impervious clothing.

Exposure Limits:

CAS NO.	COMPONENT	TLV(STEL)	1000 ppm	ACGIH
68476-86-8	Propane/butane	TWA	1000ppm	OSHA PEL

Personal Protective Equipment: Chemical resistant gloves;
Chemical safety glasses;
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits, use an organic vapor respirator with dust, mist, and fume filters;
Impervious clothing



KO-17 Spray Can



General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Do not inhale gases / fumes / aerosols.
Wash hands before breaks and at the end of work.
Avoid contact with eyes and skin.

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Red Liquid	Odor:	Liquid - Mild
Physical State:	Liquid in a spray can under pressure	Solubility:	Soluble in water
Spec Grav./Density:	Liquid - 0.89	Flash Point:	> 93 °C (> 199 °F) (ASTM D-93), Liquid
Viscosity:	Kinematic at 37.8 °C (100 °F): 30 cSts (ASTM D455), liquid	Vapor Density:	> 1 @ 20 - 25 °C (68 - 77 °F) (Air = 1.0) Liquid
Boiling Point:	240°C (464°F), Liquid	Auto-Ignition Temp:	Not determined
Vapor Pressure:	< 0.1 mmHg @ 20 °C (68 °F) Liquid	UFL/LFL:	No data available
pH:	Not determined		
Evaporation Rate:	Not determined		

10

STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction under normal use.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Elevated temperatures
Materials to Avoid:	Strong Acids; Strong Bases Strong Oxidizing Agents.
Hazardous Decomposition:	Carbon oxides, sulphur oxides
Hazardous Polymerization:	Will not occur.

11

TOXICOLOGICAL INFORMATION

Risk of serious damage to eyes.
Irritating to skin.

Acute oral toxicity: LD/50 (Rat) estimated >2000 mg/kg
Acute dermal toxicity: LD/50 (Rabbit) estimated >2000 mg/kg

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Additional toxicological information:

The product shows the following dangers according to manufacturer approved calculation methods for preparations:

Carcinogenic Status:



KO-17 Spray Can

Contains Naphthalene. Naphthalene is classified as carcinogenic by IARC (Group 2B) and NTP (Group 2-Reasonably anticipated). Contains an o-Toluidine-based azo dye. Metabolic studies on some Azo-dyes, following prolonged skin or oral cavity contact, have detected reduction of azo bonds to aromatic amines. This product, therefore, could potentially metabolize to o-toluidine and o-aminoazotoluene upon prolonged skin or oral cavity contact. o-Toluidine and o-aminoazotoluene have been identified as animal carcinogens.

Reproductive effects:

May affect reproductive system. Contains: a version of 2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, arheptyl ar', ar"-me derivatives. A reproductive screening study in rats with some versions of 2-Naphthalenol, 1-[[4-(phenylazo)phenyl]azo]-, ar-heptyl ar', ar"-me derivatives produced adverse effects on reproduction [ovarian atrophy; reduced litter size; reduced pup weight with no apparent abnormal morphology of the surviving pups] at 20 and 80 mg/kg/day. The relevance of these findings for humans is uncertain, but may be predictive of the potential to cause harm.

STOT - single exposure: No data available

STOT - repeated exposure: No data available

12

ECOLOGICAL INFORMATION

Ecotoxicity

84133-50-6 Secondary alcohol ethoxylates : LC50/96h: 3.5 - 4.9 mg/l (Fish)
EC50/48h: 3.1 mg/l (daphnia)

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

13

DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations

Empty containers may retain product residue (liquid and/or vapor) and can be dangerous.

14

TRANSPORT INFORMATION

DOT, IATA, IMDG

UN1950, aerosols, flammable, 2.1

15

REGULATORY INFORMATION

TSCA All components are on the Inventory list

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

SARA 311/312 Hazard classes

Immediate Hazard - Yes



KO-17 Spray Can

Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 313 (TRI reporting)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

California Prop 65

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

16

OTHER INFORMATION

NFPA: Health = 2, Fire = 4, Reactivity = 0, Specific Hazard = n/a



This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Author: Sherwin Inc.

Publication Date: June 14, 2022

Revision No. 0

Revision Date: 6/14/2022

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

KEM® 400 Enamel - Acrylic Modifier

V70V411

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : KEM® 400 Enamel - Acrylic Modifier

Product code : V70V411

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Paint or paint related material.

: Industrial use only.

1.3 Details of the supplier of the safety data sheet

Compania Sherwin-Williams S.A. de C.V.
Poniente 140 No.595
Col. Industrial Vallejo, Del. Azcapotzalco
C.P. 02300, Ciudad de México, México

National contact

Sherwin-Williams Canada Inc.
180 Brunel Road
Mississauga, Ontario L4Z 1T5 Canada

e-mail address of person responsible for this SDS : MSDS@sherwin.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : 111 (general public) /0344 892 111 (Medical professional (NHS) only)

Supplier

Telephone number : Not available.

Hours of operation : Not available.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 2, H225

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



SECTION 2: Hazards identification

Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapor.

Precautionary statements

Prevention

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.

Response

: Not applicable.

Storage

: Not applicable.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: FOR INDUSTRIAL USE ONLY

Special packaging requirements

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixture :

Product/ingredient name	Identifiers	%	Classification	Type
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
Hydrotreated Heavy Petroleum Naphtha	REACH #: 01-2119457273-39 EC: 918-481-9 CAS: 64742-48-9	≤0.3	Asp. Tox. 1, H304 EUH066 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray or mist.

- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

SECTION 5: Firefighting measures

Special protective actions for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

Keep unnecessary and unprotected personnel from entering.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

: Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.
Information on fire and explosion protection
Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all

SECTION 7: Handling and storage

cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Contaminated absorbent material may pose the same hazard as the spilled product.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
toluene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 384 mg/m ³ 15 minutes. TWA: 191 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
: Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
toluene	DNEL	Short term Inhalation	226 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Short term Inhalation	226 mg/m³	General population [Human via the environment]	Local
	DNEL	Long term Dermal	226 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	226 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	56.5 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Long term Oral	8.13 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	192 mg/m³	Workers	Local
	DNEL	Short term Inhalation	384 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	384 mg/m³	Workers	Local
	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	56.5 mg/m³	General population [Consumers]	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
toluene	Fresh water sediment	0.68 mg/l	Assessment Factors
	Marine water sediment	0.68 mg/l	Assessment Factors
	Sewage Treatment Plant	13.61 mg/l	Assessment Factors
	Soil	2.89 mg/kg	Assessment Factors
	Fresh water sediment	16.39 mg/kg dwt	-
	Marine water sediment	16.39 mg/kg dwt	-

8.2 Exposure controls

- Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.
: Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Use safety eyewear designed to protect against splash of liquids.
- Skin protection**
- Hand protection** : Wear suitable gloves tested to EN374.
- Gloves** : Gloves for short term exposure/splash protection (less than 10 min.): Nitrile>0.12 mm
Gloves for splash protection need to be changed immediately when in contact with chemicals.
Gloves for repeated or prolonged exposure (breakthrough time > 240 min.)
When the hazardous ingredients in Section 3 contain any of the following: Aromatic solvents (Xylene, Toluene) or Aliphatic solvents or Mineral Oil use: Polyvinyl alcohol (PVA) gloves 0.2-0.3 mm
Otherwise use: Butyl gloves >0.3 mm
For long term exposure or spills (breakthrough time >480 min.): Use PE laminated gloves as under gloves
Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.
The recommendation for the type or types of glove to use when handling this product is based on information from the following source: Solvent resin manufacturers and European Solvents Industry Group (ESIG)
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Body protection** : Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Recommended: A2P2 (EN14387). Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 8: Exposure controls/personal protection

Environmental exposure controls : Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state : Liquid.
Color : Clear.
Odor : Solvent.
Odor threshold : Not Available (Not Tested).
pH : Not relevant/applicable due to nature of the product.
insoluble in water.
Melting point/freezing point : Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range : 90°C
Flash point : Closed cup: 17°C [Pensky-Martens Closed Cup]
Evaporation rate : 3.22 (butyl acetate = 1)
Flammability : Flammable liquid.
Lower and upper explosion limit : LEL: 4.3% (Dimethyl Carbonate)
UEL: 12.8% (Dimethyl Carbonate)
Vapor pressure : 7.1 kPa (53 mm Hg)
Relative vapor density : 3.1 [Air = 1]
Relative density : 1.08
Solubility(ies) : Not relevant/applicable due to nature of the product.
Partition coefficient: n-octanol/ water : Not relevant/applicable due to nature of the product.
Auto-ignition temperature :

Ingredient name	°C	°F	Method
Dimethyl Carbonate	451	843.8	

- Decomposition temperature : Not relevant/applicable due to nature of the product.
Viscosity : Kinematic (40°C): >20.5 mm²/s
Explosive properties : Under normal conditions of storage and use, hazardous reactions will not occur.
Oxidizing properties : Under normal conditions of storage and use, hazardous reactions will not occur.
Particle characteristics
Median particle size : Not relevant/applicable due to nature of the product.

9.2 Other information

- Heat of combustion : 14.281 kJ/g

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
toluene	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Hydrotreated Heavy Petroleum Naphtha	LC50 Inhalation Vapor	Rat	8500 mg/m ³	4 hours
	LD50 Oral	Rat	>6 g/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
toluene	N/A	N/A	N/A	49	N/A

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
				100 mg	
	Eyes - Mild irritant	Rabbit	-	870 ug	-
	Eyes - Severe irritant	Rabbit	-	0.1 MI	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				mg	
	Skin - Mild irritant	Pig	-	24 hours 250	-
				uL	
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
	Skin - Moderate irritant	Rabbit	-	500 mg	-

Conclusion/Summary

: Not available.

Sensitization

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary

: Not available.

Reproductive toxicity

Conclusion/Summary

: Not available.

Teratogenicity

Conclusion/Summary

: Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 2	-	-

Aspiration hazard

Product/ingredient name	Result
toluene	ASPIRATION HAZARD - Category 1
Hydrotreated Heavy Petroleum Naphtha	ASPIRATION HAZARD - Category 1

Potential acute health effects

Eye contact

: No known significant effects or critical hazards.

Inhalation

: No known significant effects or critical hazards.

Skin contact

: No known significant effects or critical hazards.

Ingestion

: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: No specific data.

Inhalation

: No specific data.

Skin contact

: No specific data.

SECTION 11: Toxicological information

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
toluene	Acute EC50 12500 µg/l Fresh water	Algae - Green algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Scud - <i>Gammarus pseudolimnaeus</i> - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Coho salmon, silver salmon - <i>Oncorhynchus kisutch</i> - Fry	96 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	21 days

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
toluene	-	90	Low
Hydrotreated Heavy Petroleum Naphtha	-	10 to 2500	High

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC) : waste paint and varnish containing organic solvents or other hazardous substances 08 01 11*

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

European waste catalogue (EWC) : packaging containing residues of or contaminated by hazardous substances 15 01 10*

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

KEM® 400 Enamel - Acrylic Modifier

V70V411

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN1866	UN1866	UN1866
14.2 UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
14.3 Transport Hazard Class(es)/ Label(s)	3 	3 	3 
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.
Additional information	<u>Special provisions</u> 640 (C) <u>Tunnel code</u> D/E	<u>Emergency schedules</u> F-E, S-E	-

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not applicable.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK (GB)/REACH

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

KEM® 400 Enamel - Acrylic Modifier

V70V411

SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
KEM® 400 Enamel	≥90	3
toluene	<1	48

Labeling : Not applicable.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c

EU regulations

VOC content (2010/75/EU) : 33 w/w
357 g/l

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

🔵 Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative
N/A = Not available

Key literature references and sources for data : Not available.

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 2, H225	On basis of test data

Date of issue/Date of revision : 22, Feb, 2025

Date of previous issue : 06, Oct, 2024

Version : 7.03

14/16

SHW-A4-UK-CLP44-GB

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

KEM® 400 Enamel - Acrylic Modifier

V70V411

SECTION 16: Other information

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Repr. 2	TOXIC TO REPRODUCTION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Date of printing : 22, Feb, 2025.

Date of issue/ Date of revision : 22, Feb, 2025

Date of previous issue : 06, Oct, 2024

: If there is no previous validation date please contact your supplier for more information.

Version : 7.03

Notice to reader

In accordance with Regulation (EC) 1907/2006, REACH Regulation, Articles 31, 37, any required hazard-related information on the use of substances received as downstream user will be sent forward. Consequently, the safety data sheets for some products will contain a SUMI - Safe Use of Mixture Information - attached to the safety data sheet.

SUMI(s) will be added to the SDS for products if both the following conditions are met:

- The product is classified as hazardous for health***
- The product contains one or more REACH-registered substances for which extended safety data sheets (exposure scenarios) have been provided***

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

KEM® 400 Enamel - Acrylic Modifier

V70V411

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021

Supersedes Revision: 08/05/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean Strip Odorless Mineral Spirits

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Intended Use: Paint, stain, and varnish thinning.

Product Code: GKSP94006P, QKSP94005, QKSP945, GKSP94006, GKSP94214

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 3

Skin Corrosion/Irritation, Category 2

Specific Target Organ Toxicity (single exposure), Category 3

Aspiration Toxicity, Category 1

**GHS Signal Word:****Danger****GHS Hazard Phrases:**

Flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.

GHS Precautionary Phrases:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep cool.

GHS Response Phrases:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment see label.
Do NOT induce vomiting.
If skin irritation occurs, get medical advice/attention.
Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal Phrases:

Store container tightly closed in well-ventilated place.
Store locked up.
Dispose of contents/container according to local, state and federal regulations.

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021

Supersedes Revision: 08/05/2020

OSHA Regulatory Status:	This material is classified as hazardous under OSHA regulations.
Potential Health Effects (Acute and Chronic):	Acute health effects Eye contact: No known significant effects or critical hazards. Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Skin contact: Causes skin irritation. Defatting to the skin. Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Medical Conditions Generally None known.**Aggravated By Exposure:**

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
64742-47-8	Hydrotreated light distillate (petroleum, mineral spirits)	100.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	Inhalation: If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered. Skin contact: Wash with soap and large quantities of water for at least 15 minutes. Seek medical attention if irritation from contact persists. Eye contact: Immediately flush eyes with water, remove any contact lens, continue flushing with water for at least 15 minutes. Get medical attention. Ingestion: Do not induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.
Signs and Symptoms Of Exposure:	Primary routes of exposure: Inhalation, ingestion, and dermal.
Note to Physician:	Call your local poison control center for further instructions.

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021

Supersedes Revision: 08/05/2020

5. FIRE FIGHTING MEASURES

Flammability Classification: NFPA Class II**Flash Pt:** > 105.80 F Method Used: TAG Closed Cup**Explosive Limits:** LEL: .6 UEL: 5.5**Autoignition Pt:** 456.80 F**Suitable Extinguishing Media:** Use carbon dioxide, dry chemical powder, or foam.**Fire Fighting Instructions:** Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.**Flammable Properties and Hazards:** No data available.**Hazardous Combustion** No data available.**Products:**

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Clean-up:
Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep flares, smoking or flames out of hazard area.Small spills:
Take up the spilled liquid with sand, earth, or other noncombustible absorbent material and place in a plastic container where applicable.Large spills:
Dike far ahead of spill for later disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.**Precautions To Be Taken in Storing:** Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
64742-47-8	Hydrotreated light distillate (petroleum, mineral spirits)	ACGIH TLV	TLV: 200 mg/m3	

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021

Supersedes Revision: 08/05/2020

Respiratory Equipment (Specify Type):	For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.
Eye Protection:	Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.
Protective Gloves:	Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product.
Other Protective Clothing:	Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.
Engineering Controls (Ventilation etc.):	Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.
Work/Hygienic/Maintenance Practices:	A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[] Gas [X] Liquid [] Solid
Appearance and Odor:	Colorless to light yellow Solvent odor Odor threshold not determined.
pH:	ND
Melting Point:	-72.40 F
Boiling Point:	318.20 F - 354.20 F
Flash Pt:	> 105.80 F Method Used: TAG Closed Cup
Evaporation Rate:	< 1 (BuAC=1)
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: .6 UEL: 5.5
Vapor Pressure (vs. Air or mm Hg):	3 MM HG at 25.0 C
Vapor Density (vs. Air = 1):	4.5 Air = 1
Specific Gravity (Water = 1):	0.78
Density:	6.5
Solubility in Water:	Slight
Solubility Notes:	Very slightly soluble in the following materials: cold water. (1.5 g/l)
Saturated Vapor Concentration:	ND

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021

Supersedes Revision: 08/05/2020

Octanol/Water Partition Coefficient:	ND
Percent Volatile:	100.0 % by weight.
VOC / Volume:	780.0000 G/L
Autoignition Pt:	456.80 F
Decomposition Temperature:	No data.
Viscosity:	ND
Additional Physical Information	Conductivity = <5 picosiemens/meter (unadditized) ND = Not Determined

10. STABILITY AND REACTIVITY

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. Do not store with strong oxidizing agents.
Incompatibility - Materials To Avoid:	Incompatible with strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Thermal decomposition may produce carbon monoxide and carbon dioxide.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:	In animal studies utilizing mineral spirits containing up to 22% aromatics indicated that the acute central nervous system effects are reversible. Based on existing animal studies, the potential for persistent effects is not clear.
Irritation or Corrosion:	Primary dermal irritation studies (four hour exposure) in rabbits utilizing mineral spirits containing less than 2% aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented. Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. Also, sensory respiratory tract irritation was evident by reduced breathing rates in the test animals in certain studies.
Symptoms related to Toxicological Characteristics:	Eye contact: Adverse symptoms may include the following: pain or irritation watering redness Inhalation: Repeated or prolonged overexposure to solvents can cause brain or other nervous system damage. The symptoms can include the loss of memory, the loss of intellectual capacity and the loss of coordination. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness Skin contact: Adverse symptoms may include the following: irritation redness dryness cracking Ingestion: Adverse symptoms may include the following: nausea or vomiting

SAFETY DATA SHEET

Klean Strip Odorless Mineral Spirits

Page: 6 of 7

Revision: 11/05/2021
Supersedes Revision: 08/05/2020

Carcinogenicity/Other Information: ACGIH A4 - Not Classifiable as a Human Carcinogen.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
64742-47-8	Hydrotreated light distillate (petroleum, mineral spirits)	n.a.	n.a.	A4	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: This product has not been tested as a whole. Information below will be for individual ingredients.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:	Paint related material		
DOT Hazard Class:	3	FLAMMABLE LIQUID	
UN/NA Number:	UN1263	Packing Group:	III



Additional Transport Information: The shipper may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64742-47-8	Hydrotreated light distillate (petroleum, mineral spirits)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
64742-47-8	Hydrotreated light distillate (petroleum, mineral spirits)	TSCA: Inventory

Additional Regulatory Information This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

SAFETY DATA SHEET
Klean Strip Odorless Mineral Spirits

Page: 7 of 7

Revision: 11/05/2021
Supersedes Revision: 08/05/2020

16. OTHER INFORMATION

Revision Date: 11/05/2021 **Previous revision:** 08/05/2020

Preparer Name: W.M. Barr EHS Department (901)775-0100

Additional Information About This Product: No data available.

Company Policy or Disclaimer: The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.



Revision Number: 001.1

Issue date: 12/05/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	Loctite Tub & Tile 2in1 Seal & Bond	IDH number:	1936464
Product type:	Sealant	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:	Telephone: +1 (800) 624-7767 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887		
Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067			

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: ABRASION COULD RELEASE RESPIRABLE PARTICLES OF SILICA QUARTZ, A CANCER HAZARD BY INHALATION. NORMAL USE OF THIS PRODUCT CAUSES NO SUCH RELEASE.

CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
EYE IRRITATION	2A

PICTOGRAM(S)



Precautionary Statements

Prevention:	Wash thoroughly after handling. Wear eye and face protection.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If eye irritation persists: Get medical attention.
Storage:	Not prescribed
Disposal:	Not prescribed

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Limestone	1317-65-3	10 - 30
Ethylene glycol	107-21-1	1 - 5
Titanium dioxide	13463-67-7	1 - 5
n-Butyl acetate	123-86-4	0.1 - 1
Quartz (SiO ₂)	14808-60-7	0.1 - 1

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If symptoms persist, seek medical advice.
Skin contact:	Wash affected area immediately with soap and water. If symptoms develop and persist, get medical attention.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Rinse out mouth. Do not drink. Never give anything by mouth to an unconscious person. If adverse health effects develop seek medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Water may be unsuitable as an extinguishing media, but may be helpful in keeping adjacent containers cool.
Unusual fire or explosion hazards:	This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a slight fire hazard.
Hazardous combustion products:	Carbon dioxide Carbon monoxide. Oxides of nitrogen. Oxides of hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Ventilate area. Do not allow product to enter sewer or waterways.
Clean-up methods:	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Absorb spill with inert material. Shovel material into appropriate container for disposal. Wear appropriate protective equipment and clothing during clean-up.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes. Avoid prolonged or repeated skin contact with this material. Use only in well-ventilated areas. Wash hands before breaks and immediately after handling the product. Keep out of the reach of children.
Storage:	Keep from freezing.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Limestone	10 mg/m ³ TWA Total dust.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust.	None	None
Ethylene glycol	100 mg/m ³ Ceiling Aerosol.	None	None	None
Titanium dioxide	10 mg/m ³ TWA	15 mg/m ³ PEL Total dust.	None	None
n-Butyl acetate	150 ppm TWA 200 ppm STEL	150 ppm (710 mg/m ³) PEL	None	None
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable. 0.3 mg/m ³ TWA Total dust.	None	None

Engineering controls:

Use local exhaust ventilation.

Respiratory protection:

No personal respiratory protective equipment normally required.

Eye/face protection:

None required in normal use.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	pasty
Color:	white
Odor:	Acetate
Odor threshold:	Not available.
pH:	6.5 - 7.5
Vapor pressure:	17.5 mm hg (20 °C (68°F))
Boiling point/range:	> 100 °C (> 212°F)
Melting point/ range:	Not available.
Specific gravity:	1.3
Vapor density:	Heavier than air, (Air = 1)
Flash point:	68.3 °C (154.94 °F) Pensky Martens closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Evaporation rate:	0.3 (Water = 1)
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	1.17 %; 143 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity:	360,000 - 520,000 cp
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Carbon dioxide. Carbon monoxide. Oxides of nitrogen. Hydrocarbons.
Incompatible materials:	Not available.
Reactivity:	Not available.
Conditions to avoid:	None known

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation

Potential Health Effects/Symptoms

Inhalation:	Inhalation of vapors from uncured sealant may cause respiratory tract irritation. Contains crystalline silica (quartz), which is classified as a possible carcinogen. However, the crystalline silica present in this product is encapsulated in the liquid and will only be liberated if the product is sanded or abraded, and even then what is liberated will not be pure crystalline silica. Appropriate precautions, however, should be taken if the product is sanded or abraded to prevent personnel from breathing the dust.
Skin contact:	Prolonged or repeated contact with this product may dry and/or defat the skin.
Eye contact:	Contact with uncured product may irritate the eyes.
Ingestion:	Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Limestone	None	Nuisance dust
Ethylene glycol	Oral LD50 (RAT) = 5.89 g/kg Dermal LD50 (RABBIT) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
n-Butyl acetate	Oral LD50 (RAT) = 14,000 mg/kg Oral LD50 (RAT) = 14,130 mg/kg Inhalation LC50 (, 4 h) = 160 mg/l	Irritant, Central nervous system
Quartz (SiO ₂)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Limestone	No	No	No
Ethylene glycol	No	No	No
Titanium dioxide	No	Group 2B	No
n-Butyl acetate	No	No	No
Quartz (SiO ₂)	Known To Be Human Carcinogen.	Group 1	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Dispose of according to Federal, State and local governmental regulations.
Hazardous waste number:	It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

International Air Transportation (ICAO/IATA)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

Water Transportation (IMO/IMDG)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis
CERCLA/SARA Section 311/312:	Fire, Immediate Health, Delayed Health
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Ethylene glycol (CAS# 107-21-1).
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

Issue date: 12/05/2014

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 001.0

Issue date: 04/22/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	Loctite PL Marine Fast Cure	IDH number:	2016891
Product type:	Joint sealant, polymer silan-modified	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:			
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention:	Avoid breathing vapors, mist, or spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.
Storage:	Not prescribed
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	1 - 5

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If symptoms persist, seek medical advice.
Skin contact:	Wash with soap and water. If skin irritation persists, call a physician. Wipe off paste with paper towel or cloth.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. If symptoms develop and persist, get medical attention.
Ingestion:	Do not induce vomiting. If a person feels unwell or symptoms of skin irritation appear, consult a physician.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	carbon dioxide, foam, powder, water spray jet, fine water spray
Special firefighting procedures:	Wear protective equipment. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	None identified.
Hazardous combustion products:	Carbon monoxide. Carbon dioxide. Hydrogen sulfide. Sulphur oxides

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Store in a partly filled, closed container until disposal. Spilled material will solidify. Scrape up as much material as possible. Maintain good ventilation for large spills.

7. HANDLING AND STORAGE

Handling:	Do not handle contact lenses until all sealant has been removed from hands. Residual sealant may transfer to lenses and cause eye irritation. Avoid contact with eyes, skin and clothing. Keep out of the reach of children. Use only with adequate ventilation. Protect from moisture.
Storage:	For safe storage, store between -20 °C (-4°F) and 50 °C (122°F) Store in a cool, dry area. Avoid moisture.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	None	None	None	None

Engineering controls:	Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Eye/face protection:	Safety goggles or safety glasses with side shields.
Skin protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	white
Odor:	Slightly, minty
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	< 1 mbar
Boiling point/range:	Not available.
Melting point/ range:	Not applicable
Specific gravity:	1.41 at 20 °C (68°F)
Vapor density:	Heavier than air.
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not applicable
Evaporation rate:	Not applicable
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	1 %; 14.14 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity:	1,400,000 cp
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO ₂) are released.
Incompatible materials:	None known
Reactivity:	Not available.
Conditions to avoid:	None known.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin contact, Eye contact

Potential Health Effects/Symptoms

Inhalation: Not a relevant route of exposure.
Skin contact: Prolonged or repeated contact with uncured sealant may cause skin irritation. May cause skin sensitization.
Eye contact: Direct contact may cause temporary redness and discomfort.
Ingestion: Not expected under normal conditions of use.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis
CERCLA/SARA Section 311/312:	Immediate Health
CERCLA/SARA Section 313:	None above reporting de minimis
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: First issue.

Prepared by: Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

Issue date: 04/22/2015

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

SAFETY DATA SHEET

Professional LYSOL® Disinfectant Spray - All Scents



1. Product and company identification

Product name : Professional LYSOL® Disinfectant Spray - All Scents

Distributed by : Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue, Unit #2
Mississauga, Ontario L4W 5S9
CANADA
Telephone: +1 905 283 7000

Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Disinfectant.

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0224478 v15.0

Formulation # : 1178-172 (0175917 v1.0 & 0242193 v2.0) Crisp Linen
1338-015 (0175918 v1.0 & 0258756 v1.0) Spring Waterfall
1338-018 (0175934 v1.0) Green Apple / Green Apple Breeze
1338-021 (0175938 v1.0) Crisp Berry
1338-019 (0175919 v1.0) Country
1338-026 (0175929 v1.0) Country Morning Breeze
1338-017 (0172927 v1.0) Lemon Breeze
0175940 v2.0
0175933 v1.0

EPA ID No. : 777-99 (Retail), 777-99-675 (Professional)

DIN # : 02279177

UPC Code / Sizes : Tin plate steel cans.

Relevant identified uses of the substance or mixture and uses advised against

D0224478 v15.0

1. Product and company identification

Identified uses

Disinfectant. Consumer uses

2. Hazards identification

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 2
GASES UNDER PRESSURE - Compressed gas
EYE IRRITATION - Category 2B

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : Flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes eye irritation.

Precautionary statements

General : Not applicable.

Prevention : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Wash thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : Not applicable.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
ethanol	30 - 60	64-17-5
butane	5 - 10	106-97-8
propane	1 - 5	74-98-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

D0224478 v15.0

4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

D0224478 v15.0

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

D0224478 v15.0

6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
ethanol	ACGIH TLV (United States, 3/2018). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. NIOSH REL (United States, 10/2016). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours.
butane	OSHA PEL 1989 (United States, 3/1989). TWA: 800 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 800 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours. ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes.

D0224478 v15.0

8. Exposure controls/personal protection

propane

OSHA PEL 1989 (United States, 3/1989).TWA: 1800 mg/m³ 8 hours.

TWA: 1000 ppm 8 hours.

NIOSH REL (United States, 10/2016).

TWA: 1000 ppm 10 hours.

TWA: 1800 mg/m³ 10 hours.**OSHA PEL (United States, 5/2018).**

TWA: 1000 ppm 8 hours.

TWA: 1800 mg/m³ 8 hours.**ACGIH TLV (United States, 3/2018). Oxygen Depletion [Asphyxiant].**

Appropriate engineering controls

- : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

- : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

D0224478 v15.0

9. Physical and chemical properties

Appearance

Physical state	: Liquid. [Aerosol.]
Color	: Clear.
Odor	: Fragrant.
Odor threshold	: Not available.
pH	: 10.5 to 11.8 [Conc. (% w/w): 100%]
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 18.6°C (65.5°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.8667 to 0.8967
Density	: 0.8667 to 0.8967 g/cm ³ [25°C (77°F)]
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Aerosol product

Type of aerosol	: Spray
Heat of combustion	: 17.99 kJ/g
Ignition distance	: <45.72 cm

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

D0224478 v15.0

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
butane	LC50 Inhalation Vapor	Rat	658000 mg/m ³	4 hours
Lysol® Brand Disinfectant Spray, All Scents (Aerosol)_D0224478_NA	LC50 Inhalation Vapor	Rat	>2.12 mg/l	4 hours
				Maximum attainable concentration
	LD50 Dermal	Rat	>5050 mg/kg	-
	LD50 Oral	Rat	>5050 mg/kg	-

Conclusion/Summary : Not classified. Harmful. * Information is based on toxicity test result of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanol	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 microliters	-
	Skin - Moderate irritant	Rabbit	-	400 milligrams	-
Lysol® Brand Disinfectant Spray, All Scents (Aerosol)_D0224478_NA	Eyes - Cornea opacity	Rabbit	0	24 hours 20 milligrams	-
	Skin - Primary dermal irritation index (PDII)	Rabbit	0	72 hours	4 days
				4 hours	72 hours

Conclusion/Summary

Skin : Non-irritant to skin. * Information is based on toxicity test result of a similar product.

Eyes : Moderately irritating to eyes. * Information is based on toxicity test result of a similar product.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Lysol® Brand Disinfectant Spray, All Scents (Aerosol)_D0224478_NA	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer to skin. * Information is based on toxicity test result of a similar product.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

D0224478 v15.0

11. Toxicological information

Carcinogenicity

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Classification

Product/ingredient name	OSHA	IARC	NTP
ethanol	-	1	-

Reproductive toxicity

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 irritation
 watering
 redness
Inhalation : Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

D0224478 v15.0

11. Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
ethanol	7000	N/A	N/A	124.7	N/A
butane	N/A	N/A	N/A	658	N/A

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 11000000 µg/l Marine water	Fish - Alburnus alburnus	96 hours
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days

Conclusion/Summary : Based on available data, the classification criteria are not met.

Persistence and degradability

Conclusion/Summary : Based on available data, the classification criteria are not met.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ethanol	-0.35	-	low
butane	2.89	-	low
propane	1.09	-	low

D0224478 v15.0

12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	Aerosols	AEROSOLS	AEROSOLS	Aerosols, flammable
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

DOT Classification : Limited Quantity
 TDG Classification : Limited Quantity
 IMDG : Limited Quantity
 IATA : See DG List

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

D0224478 v15.0

15. Regulatory information

U.S. Federal regulations : **Clean Water Act (CWA) 311:** ammonia, anhydrous
Clean Air Act (CAA) 112 regulated flammable substances: butane; propane

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Ammonia	<0.1	Yes.	500	-	100	-

SARA 304 RQ : 343360.5 lbs / 155885.7 kg [46706 gal / 176801.3 L]

SARA 311/312

Classification : FLAMMABLE AEROSOLS - Category 2
 GASES UNDER PRESSURE - Compressed gas
 EYE IRRITATION - Category 2B

Composition/information on ingredients

Name	%	Classification
ethanol	30 - 60	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A
butane	5 - 10	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas
propane	1 - 5	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas

State regulations

Massachusetts : The following components are listed: ETHYL ALCOHOL; DENATURED ALCOHOL; BUTANE; PROPANE

New York : None of the components are listed.

New Jersey : The following components are listed: ETHYL ALCOHOL; ALCOHOL; BUTANE; PROPANE

Pennsylvania : The following components are listed: DENATURED ALCOHOL; ETHANOL; BUTANE; PROPANE

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Label elements

CCCR

Signal word : DANGER

D0224478 v15.0

15. Regulatory information

- Hazard statements** : EXTREMELY FLAMMABLE.
CONTAINER MAY EXPLODE IF HEATED.
CONTENTS UNDER PRESSURE.
CONTAINER MAY EXPLODE IF HEATED CONTENTS MAY CATCH FIRE CAUSES
BURNS DANGEROUS FUMES FORM WHEN MIXED WITH OTHER PRODUCTS
- Precautionary measures** : Keep out of reach of children. DO NOT use in presence of open flame or spark. Do not
puncture or incinerate container. Do not store
above the following temperature: 50C
Use only in a well-ventilated area. Keep away from flames, such as a pilot light, and any
object that sparks, such as an electric motor. Store away from heat. Handle with care.
Keep out of reach of children. Wear protective gloves and eye/face protection:
Chemical splash goggles or face shield. Use chemical-resistant, impervious gloves.
Wear appropriate respirator when ventilation is inadequate.

EPA

- Signal word:** : CAUTION
- Hazard statements** : FLAMMABLE: Contents under pressure.
Causes moderate eye irritation.

- Special Inert substance.** : No known significant effects or critical hazards.
- Precautionary measures** :

Keep out of the reach of children. Do not spray in eyes, on skin or on clothing. Wash
thoroughly with soap and water after handling and before eating, drinking, chewing gum,
using tobacco or using the toilet.
Keep away from heat, sparks and open flame. Do not puncture or incinerate container.
Exposure to temperatures above 130°F may cause bursting.

- Skin sensitizer** : No known significant effects or critical hazards.

Additional information / Recommendations

- Additional information** : Not applicable
- Recommendations** : No known significant effects or critical hazards.
- Recommendations** : No known significant effects or critical hazards.

16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	1
Flammability		4
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

D0224478 v15.0

16. Other information

National Fire Protection Association (U.S.A.)



NFPA (30B) aerosol Flammability 1

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Date of issue : 7/30/2021

Date of previous issue : 23/01/2020

Version : 15

Prepared by : Reckitt Benckiser LLC.
Product Safety Department
1 Philips Parkway
Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Addition of Professional products with EPA code.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



D0224478 v15.0

16. Other information

RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET

B58V600

Section 1. Identification

Product name : MACROPOXY® 646 (Part B)
Hardener

Product code : B58V600

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 57.9% (oral), 67.5% (dermal), 57.9% (inhalation)

GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Flammable liquid and vapor.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

Date of issue/Date of revision : 4/3/2025

Date of previous issue : 3/7/2025

Version : 29

1/19

B58V600
MACROPOXY® 646 (Part B)
Hardener

SHW-85-NA-GHS-US

Section 2. Hazards identification

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: IF exposed or concerned: Get medical advice or attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

Ingredient name	% by weight	Identifiers
Crystalline Silica, respirable powder	≥50 - ≤75	14808-60-7
Epoxy Polymer	≥10 - ≤25	1675-54-3
Methyl Isobutyl Ketone	≤10	108-10-1
Xylene, mixed isomers	≤3	1330-20-7
Ethylbenzene	<1	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Flammable liquid.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. 

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. 

Section 7. Handling and storage

Precautions for safe handling

- Protective measures
- : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene
- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities
- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Crystalline Silica, respirable powder	14808-60-7	ACGIH TLV (United States, 1/2024) [Silica, crystalline] A2. TWA 8 hours: 0.025 mg/m³. Form: Respirable fraction. NIOSH REL (United States, 10/2020) [SILICA, CRYSTALLINE] NIA. TWA 10 hours: 0.05 mg/m³. Form: respirable dust. OSHA PEL (United States, 5/2018) [Silica, crystalline] TWA 8 hours: 50 µg/m³. Form: Respirable dust. OSHA PEL Z3 (United States, 6/2016) TWA 8 hours: 250 / (%SiO₂+5) mppcf. Form: Respirable. TWA 8 hours: 10 / (%SiO₂+2) mg/m³. Form: Respirable.
Epoxy Polymer Methyl Isobutyl Ketone	1675-54-3 108-10-1	None. ACGIH TLV (United States, 1/2024) A3. TWA 8 hours: 20 ppm. STEL 15 minutes: 75 ppm. NIOSH REL (United States, 10/2020)

Section 8. Exposure controls/personal protection

Xylene, mixed isomers	1330-20-7	TWA 10 hours: 50 ppm. TWA 10 hours: 205 mg/m³. STEL 15 minutes: 75 ppm. STEL 15 minutes: 300 mg/m³. OSHA PEL (United States, 5/2018) TWA 8 hours: 100 ppm. TWA 8 hours: 410 mg/m³. ACGIH TLV (United States, 1/2024) [p-xylene and mixtures containing p-xylene] A4. Ototoxicant. TWA 8 hours: 20 ppm. OSHA PEL (United States, 5/2018) [Xylenes] TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³.
Ethylbenzene	100-41-4	ACGIH TLV (United States, 1/2024) A3. Ototoxicant. TWA 8 hours: 20 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 100 ppm. TWA 10 hours: 435 mg/m³. STEL 15 minutes: 125 ppm. STEL 15 minutes: 545 mg/m³. OSHA PEL (United States, 5/2018) TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Quartz	14808-60-7	CA Saskatchewan Provincial (Canada, 4/2021) TWA 8 hours: 0.05 mg/m³. Form: respirable fraction. CA British Columbia Provincial (Canada, 4/2024) [silica, crystalline - alpha quartz and cristobalite] Carc 2A, Carc 1. TWA 8 hours: 0.025 mg/m³. Form: Respirable. CA Ontario Provincial (Canada, 6/2019) [Silica, Crystalline (Quartz/Tripoli)] TWA 8 hours: 0.1 mg/m³. Form: Respirable particulate matter.. CA Quebec Provincial (Canada, 2/2024) [Silica Crystalline -Quartz] C2. TWA 8 hours: 0.1 mg/m³. Form: respirable aerosol fraction. CA Alberta Provincial (Canada, 3/2023) A2. OEL 8 hours: 0.025 mg/m³. Form: Respirable particulate.
Methyl isobutyl ketone	108-10-1	CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 75 ppm. TWA 8 hours: 50 ppm. CA British Columbia Provincial (Canada, 4/2024) Carc 2B. TWA 8 hours: 20 ppm.

Section 8. Exposure controls/personal protection

Xylene	1330-20-7	STEL 15 minutes: 75 ppm. CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 20 ppm. STEL 15 minutes: 75 ppm. CA Quebec Provincial (Canada, 2/2024) C3. TWA EV 8 hours: 20 ppm. STEL 15 minutes: 75 ppm. CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 205 mg/m³. OEL 8 hours: 50 ppm. OEL 15 minutes: 75 ppm. OEL 15 minutes: 307 mg/m³. CA Saskatchewan Provincial (Canada, 4/2021) [Xylene] STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm. CA British Columbia Provincial (Canada, 4/2024) [xylene (o, m & p isomers)] TWA 8 hours: 100 ppm. STEL 15 minutes: 150 ppm. CA Ontario Provincial (Canada, 6/2019) [Xylene (o-, m-, p-isomers)] STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm. CA Quebec Provincial (Canada, 2/2024) [Xylene] TWA EV 8 hours: 100 ppm. TWA EV 8 hours: 434 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 651 mg/m³. CA Alberta Provincial (Canada, 3/2023) [Dimethylbenzene] OEL 8 hours: 100 ppm. OEL 15 minutes: 651 mg/m³. OEL 15 minutes: 150 ppm. OEL 8 hours: 434 mg/m³.
Ethylbenzene	100-41-4	CA Saskatchewan Provincial (Canada, 4/2021) STEL 15 minutes: 125 ppm. TWA 8 hours: 100 ppm. CA British Columbia Provincial (Canada, 4/2024) Carc 2B. TWA 8 hours: 20 ppm. CA Ontario Provincial (Canada, 6/2019) TWA 8 hours: 20 ppm. CA Quebec Provincial (Canada, 2/2024) C3. TWA EV 8 hours: 20 ppm. CA Alberta Provincial (Canada, 3/2023) OEL 8 hours: 100 ppm. OEL 8 hours: 434 mg/m³. OEL 15 minutes: 543 mg/m³. OEL 15 minutes: 125 ppm.

Occupational exposure limits (Mexico)

Section 8. Exposure controls/personal protection

Ingredient name	CAS #	Exposure limits
Crystalline Silica, respirable powder	14808-60-7	NOM-010-STPS-2014 (Mexico, 4/2016) A2. TWA 8 hours: 0.025 mg/m ³ . Form: Respirable fraction.
Methyl Isobutyl Ketone	108-10-1	NOM-010-STPS-2014 (Mexico, 4/2016) A3. TWA 8 hours: 50 ppm. STEL 15 minutes: 75 ppm.
Xylene, mixed isomers	1330-20-7	NOM-010-STPS-2014 (Mexico, 4/2016) [Xileno, mezcla] A4. STEL 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.

Biological exposure indices (United States)

Ingredient name	Exposure indices
Methyl Isobutyl Ketone	ACGIH BEI (United States, 1/2024) BEI: 1 mg/l, methyl isobutyl ketone [in urine]. Sampling time: end of shift.
Xylene, mixed isomers	ACGIH BEI (United States, 1/2024) [xylenes (technical or commercial grades)] BEI: 0.3 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
Ethylbenzene	ACGIH BEI (United States, 1/2024) BEI: 150 mg/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

Ingredient name	Exposure indices
Methyl Isobutyl Ketone	Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) BEI: 2 mg/L, MIBK [in urine]. Sampling time: at the end of the work shift.
Xylene, mixed isomers	Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methyl hippuric acids [in urine]. Sampling time: at the end of the work shift.

Section 8. Exposure controls/personal protection

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<u>Individual protection measures</u>	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
<u>Skin protection</u>	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid.
Color	: Colorless.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Not available.

Section 9. Physical and chemical properties

Boiling point or initial boiling point and boiling range	: 113°C (235.4°F)
Flash point	: Closed cup: 23°C (73.4°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 1.62 (butyl acetate = 1)
Flammability	: Flammable liquid.
Lower and upper explosion limit/flammability limit	: Lower: 1% Upper: 7.5%
Vapor pressure	: 2.1 kPa (16 mm Hg)
Relative vapor density	: 3.45 [Air = 1]
Relative density	: 1.61
Density	: 1.61 g/cm ³
Solubility(ies)	:

Media	Result
cold water	Not soluble

Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): >20.5 mm ² /s (>20.5 cSt)
Molecular weight	: Not applicable.
Particle characteristics	
Median particle size	: Not applicable.
Heat of combustion	: 4.12 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

Epoxy Polymer

Result

Rabbit - Dermal - LD50

20 g/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Gross Metabolite Changes - Weight loss or decreased weight gain

Methyl Isobutyl Ketone

Rat - Oral - LD50

2080 mg/kg

Rat - Oral - LD50

4300 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes

Xylene, mixed isomers

Rat - Inhalation - LC50 Gas.

6700 ppm [4 hours]

Toxic effects: Behavioral - Somnolence (general depressed activity)

Ethylbenzene

Rat - Oral - LD50

3500 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes

Rabbit - Dermal - LD50

>5000 mg/kg

Conclusion/Summary [Product]

: Not available.

Skin corrosion/irritation

Product/ingredient name

Epoxy Polymer

Result

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Methyl Isobutyl Ketone

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Xylene, mixed isomers

Rat - Skin - Mild irritant

Duration of treatment/exposure: 8 hours

Amount/concentration applied: 60 uL

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Ethylbenzene

Rabbit - Skin - Moderate irritant

Amount/concentration applied: 100 %

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 15 mg

Conclusion/Summary [Product]

: Not available.

Serious eye damage/eye irritation

Product/ingredient name

Result

Section 11. Toxicological information

Epoxy Polymer

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 2 mg

Methyl Isobutyl Ketone

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 uL

Xylene, mixed isomers

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 40 mg

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 87 mg

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 5 mg

Ethylbenzene

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Crystalline Silica, respirable powder	+	1	Known to be a human carcinogen.
Epoxy Polymer	-	3	-
Methyl Isobutyl Ketone	-	2B	-
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

Result

Methyl Isobutyl Ketone

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Xylene, mixed isomers

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Ethylbenzene

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name

Result

Crystalline Silica, respirable powder

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 1

Xylene, mixed isomers

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Ethylbenzene

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Aspiration hazard

Product/ingredient name

Result

Xylene, mixed isomers

ASPIRATION HAZARD - Category 1

Ethylbenzene

ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact

: Causes serious eye irritation.

Inhalation

: No known significant effects or critical hazards.

Skin contact

: Causes skin irritation. May cause an allergic skin reaction.

Ingestion

: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Date of issue/Date of revision	: 4/3/2025	Date of previous issue	: 3/7/2025	Version	: 29	13/19
B58V600	MACROPOXY® 646 (Part B)			SHW-85-NA-GHS-US		
	Hardener					

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

- General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
MACROPOXY® 646 (Part B)	100562.5	45130.9	N/A	48.2	N/A
Epoxy Polymer	N/A	20000	N/A	N/A	N/A
Methyl Isobutyl Ketone	2080	N/A	N/A	11	N/A
Xylene, mixed isomers	4300	2500	N/A	N/A	N/A
Ethylbenzene	3500	N/A	N/A	11	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Methyl Isobutyl Ketone	Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 29 days; <u>Size</u> : 21 mm; <u>Weight</u> : 0.141 g 505 mg/l [96 hours] <u>Effect</u> : Mortality Chronic - NOEC - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> 78 mg/l [21 days] <u>Effect</u> : Behavior Chronic - NOEC - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> - Embryo <u>Age</u> : <24 hours 168 mg/l [33 days] <u>Effect</u> : Mortality
Xylene, mixed isomers	Acute - LC50 - Marine water Crustaceans - Daggerblade grass shrimp - <i>Palaemon pugio</i> 8500 µg/l [48 hours] <u>Effect</u> : Mortality Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 31 days; <u>Size</u> : 18.4 mm; <u>Weight</u> : 0.077 g 13.4 mg/l [96 hours] <u>Effect</u> : Mortality
Ethylbenzene	Acute - LC50 - Fresh water Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i> 4200 µg/l [96 hours] <u>Effect</u> : Mortality Acute - EC50 - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> - Neonate <u>Age</u> : ≤24 hours 2.93 mg/l [48 hours] <u>Effect</u> : Intoxication Acute - EC50 - Fresh water Algae - Green algae - <i>Raphidocelis subcapitata</i> 3600 µg/l [96 hours] <u>Effect</u> : Population

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Methyl Isobutyl Ketone	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).	-	-	Emergency schedules F-E, S-E

Date of issue/Date of revision : 4/3/2025

Date of previous issue : 3/7/2025

Version : 29 16/19

B58V600 MACROPOXY® 646 (Part B)
Hardener

SHW-85-NA-GHS-US

Section 14. Transport information

	<u>ERG No.</u>	<u>ERG No.</u>	<u>ERG No.</u>		
	128	128	128		

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

U.S. Federal regulations :
[SARA 313](#)

All data given below are MAXIMUM THEORETICAL VALUES based on the product AS CURRENTLY FORMULATED and rely on information provided to us by our raw material suppliers. Our suppliers often provide an estimated value or range less than a certain upper limit. We calculate MAXIMUM THEORETICAL VALUES using defined values, if provided, or the upper limit reported by our supplier. Additionally, the suppliers' information may include amounts present in the product as unintentional byproducts or impurities. Variations may occur in individual batches due to adjustments made during production. Reporting of chemicals in this section does not necessarily indicate their presence in the final formulated product.

Ingredient name	% by weight	CAS number
Methyl Isobutyl Ketone	10	108-10-1
Xylene, mixed isomers	2	1330-20-7
Ethylbenzene	0.3	100-41-4
Lead (as Pb)	0.0004	

[California Prop. 65](#)

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

[International regulations](#)

[Montreal Protocol](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[International lists](#)

: **Australia inventory (AIIIC)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.

Date of issue/Date of revision	: 4/3/2025	Date of previous issue	: 3/7/2025	Version	: 29	17/19
B58V600	MACROPOXY® 646 (Part B) Hardener			SHW-85-NA-GHS-US		

Section 15. Regulatory information

Taiwan Chemical Substances Inventory (TCSI): Not determined.

Thailand inventory: Not determined.

Turkey inventory: Not determined.

Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		3
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

History

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Version : 29

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

Date of issue/Date of revision : 4/3/2025	Date of previous issue : 3/7/2025	Version : 29	18/19
B58V600	MACROPOXY® 646 (Part B) Hardener	SHW-85-NA-GHS-US	

Section 16. Other information

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

MATERIAL SAFETY DATA SHEET

MAGNAVIS[®] WHITE CONTRAST PAINT WCP-2

1. IDENTIFICATION

COMPANY : ITW INDIA PRIVATE LIMITED
 ADDRESS : PLOT NO 51, 52, 207 & 208, PHASE – 2, IDA
 TSIC, PASHAMMYLARAM,
 SANGAREDDY – 502 307, TELANGANA
 INDIA.
 TELEPHONE : 91 – 8455 – 224710
 FAX : 91 – 8455 – 224709
 PRODUCT USE : White Contrast paint used in Magnetic Particle Inspection
 PACKAGES : Aerosol
 NFPA Rating : Health 2, Flammability 4, Reactivity 0.
 Revision Date : OCT 28, 2024.

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS classification

Flam. Aerosol 1

Liquefied gas

Eye irrit. 2A

STOT SE 3

2.2 LABEL ELEMENTS

Hazard Pictograms (GHS) :



Signal Word (GHS)

Hazard Statement (GHS)

Precautionary statements (GHS)

: Danger
 : Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness. May displace oxygen and cause rapid suffocation.
 : Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurised container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Wear eye protection/face protection. Avoid breathing dust/fumes/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. If in eyes: Rinse cautiously with water for several



ITW India Private Limited, Plot No.51, 52, 207 & 208, Phase II, IDA, TSIC, Pashammylaram, Sangareddy Dist.- 502 307, Telangana State, India

Telephone: +91 8455 224710, Facsimile: +91 8455 224709, Email: magnafluxinfo@magnafluxindia.com, Website: www.magnaflux.in

Regd. Office: ITW India Private Limited, Level 1, Lotus Plaza, 732/1, Mehrauli Gurgaon Road, Sector - 14, Gurgaon - 122 001, Haryana, India.

Telephone : +91 - 124 - 4284381, Facsimile : +91 - 124 - 4284389, E-mail : infoindia@itw.com

Corporate Identity Number (CIN) : U32301HR1979PTC038643

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice / attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. Protect from sunlight. Do not expose to temperatures exceeding 50 deg C. Store in a well-ventilated place. Store locked up. Dispose of contents / container in accordance with local/regional/national/international regulations

2.3 OTHER HAZARDS

No additional information available

2.4 UNKNOWN ACUTE TOXICITY (GHS)

Not applicable

EMERGENCY OVERVIEW

Extremely flammable aerosol.

Fast evaporating vapors can reach hazardous levels quickly in unventilated spaces.

POTENTIAL HEALTH EFFECTS

Skin Contact : Can irritate by removing natural skin oils on long or repeated exposures

Eyes : Irritating

Inhalation : Vapors may cause dizziness or nausea

Ingestion : Not significant in small (mouthful) quantities

Medical conditions known to be aggravated by exposure to product: None

3. HAZARDOUS INGREDIENTS

3.1 Substance

Not Applicable

3.2 Mixture

<u>Ingredient</u>	<u>Wt/Wt%</u>	<u>CAS#</u>	<u>TLV</u>	<u>PEL</u>	<u>LD 50</u>	<u>LC 50</u>
2-Propanone	60-100	67-64-1	750ppm	750ppm	6g/Kg	NA
Titanium oxide	10-30	13463-67-7	10mg/m3	NA	(oral/rat) 24g/Kg	NA
					(oral/rat)	
Iso-butane(propellant)	30	75-28-5	NA	1000ppm	NA	NA

4. FIRST AID

Skin Contact : Wash off with soap water. Use soothing lotion

Eyes : Rinse carefully under upper and lower eyelids using plenty of water

Inhalation : Remove to fresh air if dizzy or nauseated

Ingestion : Do not induce vomiting. Accidental ingestion of a small mouthful quantity is not expected to cause significant harm

NOTE: In all severe cases, contact physician immediately.

5. FIRE HAZARD

Conditions of flammability : Ignition can occur if used near flames, arcs or other ignition sources

Flash point : 2 deg F (-16 deg C) (PMCC)

Flammable limits in air : 2 to 13%

Extinguishing media : Carbon dioxide, Foam, Water, DCP

Special fire fighting procedures : Keep containers cool with water spray.

Hazardous combustion products : Smoke, soot, oxides or carbon. Burning vapour may give off toxic fumes.

Unusual fire hazards : Aerosol cans may burst over 55 deg C and add contents to fire



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6. ACCIDENTAL RELEASE MEASURES

Mop up or Sweep up with absorbent (For disposal see Section 13)

7. HANDLING AND STORAGE

Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid breathing spray mist.
Keep away from sources of ignition. Take measures to prevent build up of electro static charge.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Controls	:	Use where ventilation will carry spray mist away from occupied areas
Personal protection	:	Wear safety glasses to protect eyes. Wear nitrile rubber / neoprene gloves if hand exposure is unavoidable. Respirator with filter if sprayed in enclosed, unventilated space.

9. PHYSICAL PROPERTIES

Initial boiling point (bulk)	:	56 deg C	Vapor pressure	:	185 mm Hg @ 20 deg C
Percent Volatile	:	70%	Vapor density	:	Heavier than air
Density/sp. gravity	:	0.93 g/cm ³	Evaporation rate	:	770 (BuAc=100)
Water solubility	:	70%	Appearance	:	Aerosol containing mobile ,white liquid
pH	:	Neutral	Odor	:	Solvent-alcoholic

10. STABILITY AND REACTIVITY

Stability	:	Stable
Incompatibility	:	None
Hazardous decomposition products	:	Soot, oxides of carbon if heated to combustion temperatures
Reactivity	:	None

11. TOXICOLOGICAL INFORMATION

Carcinogenicity	:	Contains no known or suspected carcinogens listed with OSHA, IARC, NTP or ACGIH
Threshold limit value	:	Not established
WHMIS information (Canada)	:	According to available information, the ingredients have not been found to show reproductive toxicity, Teratogenicity, Mutagenicity, Skin sensitization, or Synergistic toxic effects with other material.

12. ECOLOGICAL INFORMATION

No data is available on WCP-2

13. DISPOSAL

All Disposal practices must be in compliance with all local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORTATION

IATA : List of Dangerous goods

Proper shipping name	:	Aerosols, flammable
Hazard class or division	:	2.1
Identification No.	:	UN 1950
Packing Group	:	N/A

IMDG : General Index

Aerosols, flammable
2.1
UN 1950
N/A



ITW India Private Limited, Plot No.51, 52, 207 & 208, Phase II, IDA, TSIC, Pashamylaram, Sangareddy Dist.- 502 307, Telangana State, India
Telephone: +91 8455 224710, Facsimile: +91 8455 224709, Email: magnafluxinfo@magnafluxindia.com, Website: www.magnaflux.in

Regd. Office: ITW India Private Limited, Level 1, Lotus Plaza, 732/1, Mehrauli Gurgaon Road, Sector - 14, Gurgaon - 122 001, Haryana, India.
Telephone : +91 - 124 - 4284381, Facsimile : +91 - 124 - 4284389, E-mail : infoindia@itw.com

Corporate Identity Number (CIN) : U32301HR1979PTC038643

15. REGULATORY INFORMATION

TSCA : All ingredients are listed in TSCA inventory.
 CERCLA : Reportable quantity (RQ) for Acetone = 5000 lbs
 SARA TITLE III, Section 313 : Acetone
 California Proposition 65 :Warning : Contains nothing in this list
 WHMIS Class (Canada) : Aerosol : A,B-5,D-2B

NFPA Rating

NFPA Health hazard : 2
 NFPA Fire hazard : 4
 NFPA Reactivity : 0



16. OTHER INFORMATION

Revision Statement : Reviewed and Updated with GHS pictograms

MSDS/WCP-2/5 dated 10/2024



ITW India Private Limited, Plot No.51, 52, 207 & 208, Phase II, IDA, TSIC, Pashamylaram, Sangareddy Dist.- 502 307, Telangana State, India
 Telephone: +91 8455 224710, Facsimile: +91 8455 224709, Email: magnafluxinfo@magnafluxindia.com, Website: www.magnaflux.in

Regd. Office: ITW India Private Limited, Level 1, Lotus Plaza, 732/1, Mehrauli Gurgaon Road, Sector - 14, Gurgaon - 122 001, Haryana, India.
 Telephone : +91 - 124 - 4284381, Facsimile : +91 - 124 - 4284389, E-mail : infoindia@itw.com

Corporate Identity Number (CIN) : U32301HR1979PTC038643



Marvel Air Tool Oil (MM080, MM085, MM85R, MM086, MM086R, MM089 MM)

Revision 0
Revision date

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name Marvel Air Tool Oil (MM080, MM085, MM85R, MM086, MM086R, MM089 MM)

Company Turtle Wax Limited
East Gillibrands
Skelmersdale
Lancashire
WN8 9TX
England
MSDS@turtlewax.ltd.uk
www.turtlewaxeurope.com

Telephone +44 (0)1695 722161

Fax +44 (0)1695 716621

Emergency telephone number +44 (0)1695 722161 (Daytime)

Intended use Car Care Product.

2 HAZARDS IDENTIFICATION.

Main hazards Flammable Harmful if swallowed. Irritating to eyes.

3 . COMPOSITION / INFORMATION ON INGREDIENTS.

Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
o-Dichlorobenzene (1,2-Dichlorobenzene (ortho-dichlorobenzene))	0 - 5%	95-50-1	202-425-9	Xn; R22 Xi; R36/37/38 N; R50/53
Fine White Mineral Oil	70 - 100%	64742-52-5	265-155-0	
Mineral Spirits	20 - 30%	8052-41-3		Xn; R20/22 Xi; R36 R10

4. FIRST AID MEASURES

Skin contact Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

Eye contact Irritating to eyes. Contact lenses should be removed. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.

Inhalation May cause irritation to respiratory system. Seek medical attention if irritation or symptoms persist.

Ingestion Rinse mouth thoroughly. DO NOT INDUCE VOMITING. Seek medical attention if irritation or symptoms persist.

Marvel Air Tool Oil (MM080, MM085, MM85R, MM086, MM086R, MM089 MM)

Revision
Revision date

0

5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate to the surrounding fire conditions.
Fire hazards	carbon oxides may be formed in fire conditions.
Protective equipment	Wear suitable respiratory equipment when necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation of the working area. Surfaces contaminated with the product will become slippery.
Environmental precautions	Do not allow product to enter drains. Prevent further spillage if safe.
Clean up methods	Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

7. HANDLING AND STORAGE

Handling	Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.
Storage	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers. Store at temperatures between 5 °C and 35 °C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

o-Dichlorobenzene
(1,2-Dichlorobenzene (ortho-dichlorobenzene))

WEL 8-hr limit ppm: 25
WEL 15 min limit ppm: 50

WEL 8-hr limit mg/m3: 153
WEL 15 min limit mg/m3: 306

Mineral Spirits

WEL 8-hr limit ppm:
WEL 15 min limit ppm:

WEL 8-hr limit mg/m3: 575
WEL 15 min limit mg/m3:

Engineering measures Ensure adequate ventilation of the working area.

Occupational exposure controls Wash hands after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Liquid.
Colour	Red.
Odour	Characteristic.
Flash point	51°C
Relative density	0.876
Evaporation rate	<0.1 n-butyl acetate = 1.0
Melting point	-51°C

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to avoid	Store at temperatures below 35 °C.
Materials to avoid	Strong oxidising agents.
Hazardous decomposition products	Carbon oxides. Hydrocarbons.

Marvel Air Tool Oil (MM080, MM085, MM85R, MM086, MM086R, MM089 MM)

Revision 0
Revision date

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Ingestion may cause nausea and vomiting. Irritating to eyes.
Repeated or prolonged exposure	Prolonged or repeated exposure may cause irritation to skin and mucous membranes.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No known adverse environmental effects.
Mobility	Viscous liquid.
Degradability	Readily biodegradable.
Bioaccumulation	Does not bioaccumulate.

13. DISPOSAL CONSIDERATIONS

General information	Dispose of in compliance with all local and national regulations. Do not allow product to enter drains.
Disposal methods	Dispose of in compliance with all local and national regulations.
Disposal of packaging	Empty containers can be sent for disposal or recycling.

14. TRANSPORT INFORMATION

ADR/RID	Shipped in limited quantities under ADR.	
UN 1268		Packing group III
Class 3		Hazard ID 30
Proper Shipping Name	PETROLEUM DISTILLATES, N.O.S. ,	
IMDG		
UN 1268		Packing group III
Class 3		Marine pollutant .
EmS Code	F-E S-E	
IATA		
UN 1268		Packing group III
Class 3		Subsidiary risk -
Packing Instruction (Cargo)	310	Maximum quantity 220 L
Packing Instruction (Passenger)	309	Maximum quantity 60 L

Marvel Air Tool Oil (MM080, MM085, MM85R, MM086, MM086R, MM089 MM)

Revision 0
Revision date

15. REGULATORY INFORMATION

Labelling	The product is classified in accordance with 67/548/EEC.
Symbols	Xn - Harmful 
Risk phrases	R10 - Flammable. R22 - Harmful if swallowed. R36 - Irritating to eyes.
Safety phrases	S2 - Keep out of the reach of children. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Further information	Safety data sheet available for professional user on request.

16. OTHER INFORMATION

Text of risk phrases in Section 3.	R10 - Flammable. R20/22 - Harmful by inhalation and if swallowed. R22 - Harmful if swallowed. R36 - Irritating to eyes. R36/37/38 - Irritating to eyes, respiratory system and skin. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Further information	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.



SAFETY DATA SHEET

1. Identification

Product identifier	Matheson Select® Anti-Spatter and Nozzle Shield - 1 lb 8 oz
Other means of identification	
Product Code	No. MSG-620-24OZ (Item# 1008289)
Recommended use	Protects from spatter build-up
Recommended restrictions	this chemical/product is not and cannot be distributed in commerce (as defined in eSCA section 3(5)) or processed (as defined in eSCA section 3(13)) for consumer paint or coating removal.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Gases under pressure	Compressed gas
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		

Signal word

Danger

Hazard statement

Contains gas under pressure; may explode if heated. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49 °C/120 °F. Do not breathe mist or vapor. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. eake off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed or concerned: Get medical advice/attention.
Storage	Store locked up. Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause can to burst.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
methylene chloride		75-09-2	90 - 100
carbon dioxide		124-38-9	5 - 10

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENeER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. For product usage instructions, see the product label.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120 °F/49 °C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, eLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
methylene chloride (CAS 75-09-2)	SeEL	125 ppm
	eWA	25 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m ³
		5000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
carbon dioxide (CAS 124-38-9)	SeEL	30000 ppm
	eWA	5000 ppm
methylene chloride (CAS 75-09-2)	eWA	50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
carbon dioxide (CAS 124-38-9)	SeEL	54000 mg/m3
		30000 ppm
	eWA	9000 mg/m3
		5000 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichloromethane	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves such as: Polyvinyl alcohol (PVA). Viton/butyl.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state Liquid.

Form Aerosol.

Color Colorless.

Odor Ether-like.

Odor threshold Not available.

pH Not available.

Melting point/freezing point -139 °F (-95 °C) estimated

Initial boiling point and boiling range 104 °F (40 °C) estimated

Flash point None.

Evaporation rate Fast.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 15.5 % estimated

Flammability limit - upper (%) 66.4 % estimated

Vapor pressure 4517.2 hPa estimated

Vapor density > 1 (air = 1)

Relative density	1.33 estimated
Solubility(ies)	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	1033 °F (556.1 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Percent volatile	90.1 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Hydrogen chloride. Phosgene.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Harmful if swallowed.

Components	Species	Test Results
methylene chloride (CAS 75-09-2)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	52 mg/l, 6 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	ehis product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
methylene chloride (CAS 75-09-2)	2A Probably carcinogenic to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
methylene chloride (CAS 75-09-2)	Cancer	

US. National Toxicology Program (NTP) Report on Carcinogens

methylene chloride (CAS 75-09-2)

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	this product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity	the product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
methylene chloride (CAS 75-09-2)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1250 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 140.8 - 277.8 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

methylene chloride	1.25

Mobility in soil	No data available.

Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	this material and its container must be disposed of as hazardous waste. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose in accordance with all applicable regulations.

Hazardous waste code	F002: Waste methylene chloride - Spent halogenated solvent

US RCRA Hazardous Waste U List: Reference

methylene chloride (CAS 75-09-2)	U080

Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name	Aerosols, poison, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1(PGIII)
Label(s)	2.2, 6.1
Packing group	Not applicable.
Special precautions for user	Forbidden from transportation by air.
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

IATA

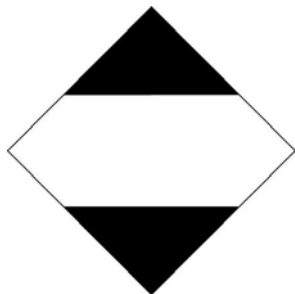
UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1

Packing group	Not applicable.
ERG Code	2P
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Not available.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

this product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

this chemical/product is not and cannot be distributed in commerce (as defined in eSCA section 3(5)) or processed (as defined in eSCA section 3(13)) for consumer paint or coating removal.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

methylene chloride (CAS 75-09-2)	0.1 % Annual Export Notification required.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

methylene chloride (CAS 75-09-2)	Cancer
	Heart
	Central nervous system
	Liver
	Skin irritation
	Eye irritation

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

methylene chloride (CAS 75-09-2)

CERCLA Hazardous Substance List (40 CFR 302.4)

methylene chloride (CAS 75-09-2)

CERCLA Hazardous Substances: Reportable quantity

methylene chloride (CAS 75-09-2) 1000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

methylene chloride (CAS 75-09-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard categories Gas under pressure
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
methylene chloride	75-09-2	90 - 100

US state regulations**US. New Jersey Worker and Community Right-to-Know Act**

carbon dioxide (CAS 124-38-9)
methylene chloride (CAS 75-09-2)

US. Massachusetts RTK - Substance List

carbon dioxide (CAS 124-38-9)
methylene chloride (CAS 75-09-2)

US. Pennsylvania Worker and Community Right-to-Know Law

carbon dioxide (CAS 124-38-9)
methylene chloride (CAS 75-09-2)

US. Rhode Island RTK

carbon dioxide (CAS 124-38-9)
methylene chloride (CAS 75-09-2)

California Proposition 65**WARNING:** Cancer - www.P65Warnings.ca.gov**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

methylene chloride (CAS 75-09-2) Listed: April 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

methylene chloride (CAS 75-09-2)

Volatile organic compounds (VOC) regulations**EPA**

VOC content (40 CFR 51.100(s)) 0 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State	
Consumer products	Not regulated
VOC content (CA)	0 %
VOC content (OTC)	0 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
eaiwan	eaiwan Chemical Substance Inventory (eCSI)	Yes
United States & Puerto Rico	eoxic Substances Control Act (eSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	07-01-2019
Prepared by	Dustin Kern
Version #	01

Disclaimer The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision information Hazard(s) identification: Response
Transport Information: Material Transport Information



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS
2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous
Products Regulation (HPR)

Revision Date 21-Jan-2025

Version 1

1. Identification

Product identifier

Product Name MEDIUM STRENGTH THREADLOCKER BLUE GEL, 10 GR

Other means of identification

Product Code PX24010

Synonyms CAN Item Number 24215

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:

ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Contains CUMENE HYDROPEROXIDE; CUMENE; TITANIUM DIOXIDE



Danger

Hazard statements

Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Wash face, hands and any exposed skin thoroughly after handling.
Do not breathe dust, fume, gas, mist, vapors and spray.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice and attention.

Skin

IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice and attention.
Take off contaminated clothing and wash before reuse.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant.

9.95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
13.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
35.25728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms

CAN Item Number 24215.

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)

CUMENE HYDROPEROXIDE	80-15-9	1-5%	-	-
PROPYLENE GLYCOL	57-55-6	1-5%	-	-
TITANIUM DIOXIDE	13463-67-7	0.1-1%	-	-
TETRASODIUM EDTA	64-02-8	0.1-1%	-	-
CUMENE	98-82-8	0.1-1%	-	-

4. First-aid measures

Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms	May cause redness and tearing of the eyes. Burning sensation.
Effects of Exposure	May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
TITANIUM DIOXIDE 13463-67-7	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
CUMENE 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) Sk* Sk*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³

Chemical name	Alberta	British Columbia	Ontario	Quebec
PROPYLENE GLYCOL 57-55-6	-	-	TWA: 10 mg/m ³ TWA: 50 ppm TWA: 155 mg/m ³	-
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
CUMENE 98-82-8	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm	TWA: 5 ppm

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
TITANIUM DIOXIDE	TWA: 0.2 mg/m ³	TWA: 10 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
	TWA: 2.5 mg/m ³		TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³
CUMENE	TWA: 5 ppm	TWA: 50 ppm	TWA: 5 ppm	TWA: 5 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
TITANIUM DIOXIDE	TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 0.2 mg/m ³ TWA: 2.5 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 30 mppcf TWA: 10 mg/m ³ STEL: 20 mg/m ³
CUMENE	TWA: 50 ppm STEL: 74 ppm	TWA: 5 ppm	TWA: 50 ppm STEL: 74 ppm	TWA: 50 ppm TWA: 245 mg/m ³ STEL: 75 ppm STEL: 365 mg/m ³ Sk*

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Paste / Gel Liquid
Appearance Blue
Color Blue
Odor Mild
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	10% in deionized water
Melting point / freezing point	No data available	Estimated
Boiling point / boiling range	> 150 °C / 302 °F	
Flash point	> 95 °C / 203 °F	
Evaporation rate	Not applicable	Butyl acetate = 1
Flammability (solid, gas)	No data available	Flammable in the presence of the following materials

		or conditions: open flames, sparks and static discharge. None known
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No Data Available	mmHg
Vapor density	No data available	Air = 1
Relative density	1.11 - 1.15	
Water solubility	No data available	Insoluble in water
Solubility(ies)	No Data Available	None known
Partition coefficient	No Data Available	None known
Autoignition temperature	No data available	Estimated
Decomposition temperature	No data available	Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
Kinematic viscosity	No Data Available	Kinematic viscosity at 100 degrees C
Dynamic viscosity	No data available	Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	4.73728	
Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion

Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Redness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	10,505.90 mg/kg
ATEmix (dermal)	13,233.80 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	12.00 mg/l

9.95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
13.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
37.95728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
35.25728 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
CUMENE HYDROPEROXIDE 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
PROPYLENE GLYCOL 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
TITANIUM DIOXIDE 13463-67-7	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h
TETRASODIUM EDTA 64-02-8	= 1658 mg/kg (Rat)	-	-
CUMENE 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE 13463-67-7	A3	Group 2B	-	X
CUMENE 98-82-8	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Occupational Safety and Health Administration of the US Department of Labor

X - Present

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
CUMENE HYDROPEROXIDE 80-15-9	-	LC50: =3.9mg/L (96h, Oncorhynchus mykiss)	-	-
PROPYLENE GLYCOL 57-55-6	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mg/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	-	EC50: >1000mg/L (48h, Daphnia magna)
TETRASODIUM EDTA 64-02-8	-	LC50: =41mg/L (96h, Lepomis macrochirus) LC50: =59.8mg/L (96h, Pimephales promelas)	-	-
CUMENE 98-82-8	EC50: =2.6mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 6.04 - 6.61mg/L (96h, Pimephales promelas) LC50: =4.8mg/L (96h, Oncorhynchus mykiss) LC50: =2.7mg/L (96h, Oncorhynchus mykiss) LC50: =5.1mg/L (96h, Poecilia reticulata)	-	EC50: =0.6mg/L (48h, Daphnia magna) EC50: 7.9 - 14.1mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
CUMENE HYDROPEROXIDE 80-15-9	1.6

PROPYLENE GLYCOL 57-55-6	-1.07
CUMENE 98-82-8	3.55

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
US EPA Waste Number	Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Natural
DSL/NDSL	Natural
EINECS/ELINCS	Natural
ENCS	Natural
IECSC	Natural
KECI	Natural
PICCS	Natural
AICS	Natural
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
CUMENE HYDROPEROXIDE - 80-15-9	1.0
SACCHARIN - 81-07-2	1.0
CUMENE - 98-82-8	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
CUMENE HYDROPEROXIDE 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
CUMENE 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
TITANIUM DIOXIDE - 13463-67-7	*Carcinogen (airborne, unbound particles of respirable size)
CUMENE - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
CUMENE HYDROPEROXIDE 80-15-9	X	X	X
PROPYLENE GLYCOL 57-55-6	X	-	X
SACCHARIN 81-07-2	X	X	X
TITANIUM DIOXIDE 13463-67-7	X	X	X

CUMENE 98-82-8	X	X	X
ACETOPHENONE 98-86-2	X	X	X
P-BENZOQUINONE 106-51-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 2 *	Flammability 1	Physical hazards 0	Personal protection X

*Chronic Hazard Star Legend * = Chronic Health Hazard*

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision Date 21-Jan-2025

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Micro-Kleen³ Surface Disinfectant

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 11/06/2017

Revision date: 12/05/2022

Version: 2.1

SECTION 1: Identification

1.1. Product identifier

Product name : Micro-Kleen³ Surface Disinfectant Cleaner
Product code : NEMK24S

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses and restrictions : Cleaner / Disinfectant / Deodorizer.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Micro-Scientific, LLC
755 Tri-State Parkway
Gurnee, IL 60031
T 1-888-253-2536

Distributor

Canadian Hospital Specialties Ltd.
2810 Coventry Road
Oakville, ON, L6H 6R1
Canada
T. 1-888-752-3920

1.4. Emergency telephone number

Emergency number : 1-800-535-5053

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-CA classification

Flam. Liq. 3 H226
Eye Irrit. 2B H319

2.2. Label elements

GHS-CA labelling

Hazard pictograms (GHS-CA) :



GHS02

Signal word (GHS-CA) :

Warning

Hazard statements (GHS-CA) :

H226 - Flammable liquid and vapour
H320 - Causes eye irritation

Precautionary statements (GHS-CA) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container in accordance with local / regional / national / international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-CA)

Not available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Micro-Kleen³ Surface Disinfectant Cleaner

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

3.2. Mixtures

Name	Product identifier	%
Isopropyl alcohol	(CAS-No.) 67-63-0	10 - 30
2-Butoxyethanol	(CAS-No.) 111-76-2	Proprietary

The exact chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold. Refer to Section 15 for additional information regarding this CBI claim.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water fog, carbon dioxide, dry chemical or alcohol foam.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon.
- Reactivity : No dangerous reaction known under conditions of normal use.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

Micro-Kleen³ Surface Disinfectant Cleaner

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Avoid breathing dust / fume / gas / mist / vapours / spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep locked up and out of reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
NIOSH	NIOSH REL (TWA) (mg/m ³)	980 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
2-Butoxyethanol (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
IDLH	US IDLH (ppm)	700 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	24 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, etc.) below recommended exposure limits.
- Hand protection : Wear chemically resistant protective gloves.
- Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : No data available.
- Colour : Colourless
- Odour : alcohol-like
- Odour threshold : No data available
- pH : 7.6
- pH solution : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Relative evaporation rate (ether=1) : No data available
- Melting point : No data available
- Freezing point : No data available

Micro-Kleen³ Surface Disinfectant Cleaner

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

Boiling point	: No data available
Flash point	: 30 °C (86 °F) TCC
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.96
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: No data available.
Partition coefficient n-octanol/water	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, kinematic (calculated value) (40 °C)	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosive limit (LEL)	: No data available
Upper explosive limit (UEL)	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition.

10.5. Incompatible materials

Oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Micro-Kleen ³ Surface Disinfectant Cleaner	
LD50 oral rat	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated Acute Toxicity Estimate)
Isopropyl alcohol (67-63-0)	
LD50 oral rat	1870 mg/kg
LD50 dermal rabbit	4059 mg/kg
LC50 inhalation rat	72600 mg/m ³ /4h
2-Butoxyethanol (111-76-2)	
LD50 oral rat	470 mg/kg
LD50 dermal rabbit	99 mg/kg
LC50 inhalation rat	450 ppm/4h

Skin corrosion/irritation : Based on available data, the classification criteria are not met.

Serious eye damage/irritation : Causes eye irritation.

Micro-Kleen³ Surface Disinfectant Cleaner

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable
2-Butoxyethanol (111-76-2)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Micro-Kleen ³ Surface Disinfectant	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Micro-Kleen ³ Surface Disinfectant	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
Additional information	: Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with Transportation of Dangerous Goods

Transportation of Dangerous Goods

UN-No. (TDG)	: UN1987
Proper Shipping Name (Transportation of Dangerous Goods)	: Alcohols, N.O.S. (Isopropanol)
TDG Primary Hazard Classes	: 3
Hazard labels (TDG)	:



Packing group	: III

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

Micro-Kleen³ Surface Disinfectant Cleaner

Safety Data Sheet

according to the Hazardous Products Regulations (HPR) WHMIS 2015

Canada WHMIS Confidential Business Information (CBI): The HMIRA number issued for this CBI claim is #11510. The date of filing is 2017-05-24

SECTION 16: Other information

Date of issue	: 11/06/2017
Revision date	: 12/05/2022
Version	: 2.1
Indication of changes	: Change in distributor name and address.
Other information	: None.

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SAFETY DATA SHEET



MOBIL 1 SYN GEAR LUBE LS 75W-90

Section 1. Identification

Product name : MOBIL 1 SYN GEAR LUBE LS 75W-90

Product description : synthetic base stocks and additives

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Gear oil

Uses advised against : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

Supplier : EXXON MOBIL CORPORATION
22777 Springwoods Village Parkway
Spring, TX 77389 USA

24-Hour emergency telephone number : 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

Product Technical Information : 800-662-4525

SDS Internet Address : www.sds.exxonmobil.com

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

Hazards not otherwise classified : None known.

Note : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	Identifiers
olefin sulfide	≤5	CAS: 68937-96-2
severely hydrotreated heavy paraffinic distillate	≤5	CAS: 64742-54-7
phosphoric acid esters, amine salt	≤3	Proprietary

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous combustion products** : Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Static Accumulator : This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
1-decene, homopolymer hydrogenated	ExxonMobil (COMPANY) TWA 8 hours: 5 mg/m ³ . Form: Aerosols (thoracic fraction).
1-dodecene, polymer with 1-decene, hydrogenated	ExxonMobil (COMPANY) TWA 8 hours: 5 mg/m ³ . Form: Aerosols (thoracic fraction).
1-decene, polymer with 1-octene and 1-dodecene, hydrogenated	ExxonMobil (COMPANY) TWA 8 hours: 5 mg/m ³ . Form: Aerosols (thoracic fraction).
olefin sulfide	None.
severely hydrotreated heavy paraffinic distillate	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
hydrotreated heavy naphthenic distillate	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
phosphoric acid esters, amine salt	None.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Amber
- Odor** : Characteristic
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : >315.56°C (>600°F) [Estimated]
- Flash point** : Open cup: 150°C (302°F) [ASTM D-92]
- Evaporation rate** : Not available.
- Flammability** : Ignitable
- Lower and upper explosion limit/flammability limit** : Lower: 0.9% [Estimated]
Upper: 7% [Estimated]
- Vapor pressure** : <0.1 mm Hg [20 °C] [Estimated]
- Relative vapor density** : >2 [Air = 1] [Estimated]
- Relative density** : 0.859
- Solubility in water** : Negligible
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.

Section 9. Physical and chemical properties and safety characteristics

Viscosity : 97.5 cSt [40 °C] [ASTM D 445]
14.8 cSt [100 °C] [ASTM D 445]

Particle characteristics

Median particle size : Not applicable.
Pour point : -39°C

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : High energy sources of ignition. Excessive heat.

Incompatible materials : Strong oxidizers

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary

Inhalation : Minimally Toxic. No end point data for material. Based on assessment of the components.
Dermal : Minimally Toxic. No end point data for material. Based on assessment of the components.
Oral : Minimally Toxic. No end point data for material. Based on assessment of the components.

Irritation/Corrosion

Conclusion/Summary

Skin : Negligible irritation to skin at ambient temperatures. No end point data for material. Based on assessment of the components.
Eyes : May cause mild, short-lasting discomfort to eyes. No end point data for material. Based on assessment of the components.
Respiratory : Negligible hazard at ambient/normal handling temperatures. No end point data for material.

Respiratory or skin sensitization

Conclusion/Summary

Skin : Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.
Respiratory : Not expected to be a respiratory sensitizer. No end point data for material.

Mutagenicity

Conclusion/Summary : Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

Carcinogenicity

Conclusion/Summary : Not expected to cause cancer. No end point data for material. Based on assessment of the components.

Reproductive toxicity

Conclusion/Summary : Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Conclusion/Summary : Not expected to cause organ damage from a single exposure. No end point data for material.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
MOBIL 1 SYN GEAR LUBE LS 75W-90	Not applicable.	-

Conclusion/Summary : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

Aspiration hazard

Conclusion/Summary : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.

Other information

Contains : Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitizing in test animals and humans.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

Conclusion/Summary

Acute toxicity : Not expected to be harmful to aquatic organisms.

Chronic toxicity : Not expected to demonstrate chronic toxicity to aquatic organisms.

Persistence and degradability

Not determined.

Bioaccumulative potential

Not determined.

Mobility in soil

Mobility : Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

Other ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Label(s) / Marks				
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** siloxanes and silicones, di-me; 4-methoxyphenol; diphenylamine
TSCA 8(a) CDR Exempt/Partial exemption: At least one component is not listed.

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

SARA 313

This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL

Section 15. Regulatory information

New York	: None of the components are listed.
New Jersey	: None of the components are listed.
Pennsylvania	: None of the components are listed.
Illinois	: None of the components are listed.

Inventory list

Australia inventory (AIRC)	: All components are listed or exempted.
Canada inventory (DSL-NDSL)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Japan inventory (CSCL)	: All components are listed or exempted.
Japan inventory (Industrial Safety and Health Act)	: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: All components are listed or exempted.
Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
United States inventory (TSCA 8b)	: All components are active or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Not classified.

New Jersey Right to Know Disclosure

Name	CAS #
Petroleum Oil (Lubricant)	

History

Date of issue/Date of revision	: 16 August 2024
Date of previous issue	: 16 July 2024

Section 16. Other information

Version : 1.02

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Product code : 201530102017_1163753

Notice to reader

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SAFETY DATA SHEET



MOBIL DTE 25 ULTRA

Section 1. Identification

Product name : MOBIL DTE 25 ULTRA

Product description : base oil and additives

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Hydraulic fluid

Uses advised against : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

Supplier : EXXON MOBIL CORPORATION
22777 Springwoods Village Parkway
Spring, TX 77389 USA

24-Hour emergency telephone number : 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

Product Technical Information : 800-662-4525

SDS Internet Address : www.sds.exxonmobil.com

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

Hazards not otherwise classified : None known.

Note : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	Identifiers
benzenamine, n-phenyl-, reaction products with 2,4,4-trimethylpentene	≤0.3	CAS: 68411-46-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. Pressurized mists may form a flammable mixture.

- Hazardous combustion products** : Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Static Accumulator : This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
severely hydrotreated heavy paraffinic distillate	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
benzenamine, n-phenyl-, reaction products with 2,4,4-trimethylpentene	None.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Amber
- Odor** : Characteristic
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : >315.56°C (>600°F)
- Flash point** : Open cup: >200°C (>392°F) [ASTM D-92]
- Evaporation rate** : Not available.
- Flammability** : Ignitable
- Lower and upper explosion limit/flammability limit** : Lower: 0.9%
Upper: 7%
- Vapor pressure** : <0.1 mm Hg [20 °C]
- Relative vapor density** : >2 [Air = 1]
- Relative density** : 0.867 [ASTM D4052]
- Solubility in water** : Negligible
- Partition coefficient: n-octanol/water** : >3.5
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : 46 cSt [40 °C] [ASTM D 445]
7.1 cSt [100 °C] [ASTM D 445]

Particle characteristics

- Median particle size** : Not applicable.
- Pour point** : -20°C [ASTM D 97]
- DMSO Extract (mineral oil only), IP-346** : <3 % by weight

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: High energy sources of ignition. Excessive heat.
Incompatible materials	: Strong oxidizers
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary

Inhalation	: Minimally Toxic. No end point data for material. Based on assessment of the components.
Dermal	: Minimally Toxic. No end point data for material. Based on assessment of the components.
Oral	: Minimally Toxic. No end point data for material. Based on assessment of the components.

Irritation/Corrosion

Conclusion/Summary

Skin	: Negligible irritation to skin at ambient temperatures. No end point data for material. Based on assessment of the components.
Eyes	: May cause mild, short-lasting discomfort to eyes. No end point data for material. Based on assessment of the components.
Respiratory	: Negligible hazard at ambient/normal handling temperatures. No end point data for material.

Respiratory or skin sensitization

Conclusion/Summary

Skin	: Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.
Respiratory	: Not expected to be a respiratory sensitizer. No end point data for material.

Mutagenicity

Conclusion/Summary

: Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

Carcinogenicity

Conclusion/Summary

: Not expected to cause cancer. No end point data for material. Based on assessment of the components.

Reproductive toxicity

Conclusion/Summary

: Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

Specific target organ toxicity (single exposure)

Conclusion/Summary

: Not expected to cause organ damage from a single exposure. No end point data for material.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
MOBIL DTE 25 ULTRA	Not applicable.	-

Section 11. Toxicological information

- Conclusion/Summary** : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.
- Aspiration hazard**
- Conclusion/Summary** : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.
- Other information**
- Contains** : Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals. Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (substituted DPA): Results from a supplier's extended one-generation dietary study with 10-week pre-mating administration of substituted DPA included decreased body weight and body weight gains in parental females during gestation and lactation, decreased number of implantation sites and decreased mean litter size. A representative formulation containing substituted DPA was tested in a rat oral gavage reproductive/developmental toxicity screening study (OECD TG 421) with a 10-week pre-mating administration period. Study results included decreased body weight and body weight gain starting in pre-mating and continuing through gestation and lactation in parental females, decreased number of implantation sites and decreasing trend in litter size. A 5 wt% classification threshold for the reproductive effects of substituted DPA was derived based on the NOAEL (50 mg/kg/day) and is consistent with the NOAEL in the supplier's study.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

Conclusion/Summary

- Acute toxicity** : Not expected to be harmful to aquatic organisms.
- Chronic toxicity** : Not expected to demonstrate chronic toxicity to aquatic organisms.

Persistence and degradability

- Biodegradability** : Base oil component -- Expected to be inherently biodegradable

Bioaccumulative potential

Conclusion/Summary

- : Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Mobility in soil

Mobility

- : Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

Other ecological information

Other adverse effects

- : No known significant effects or critical hazards.

Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper

Section 13. Disposal considerations

instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Label(s) / Marks				
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** naphthalene; siloxanes and silicones, di-me
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 307: zinc, bis[o,o-bis(2-ethylhexyl) phosphorodithioato-ks,ks']-, (t-4)-; naphthalene; ethyl benzene
Clean Water Act (CWA) 311: xylenes; naphthalene; ethyl benzene; sulfuric acid

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Section 15. Regulatory information

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
sulfuric acid	≤0.1	Yes.	1000	66.3	1000	66.3

SARA 304 RQ : 3703703703.7 lbs / 1681481481.5 kg [512341883.9 gal / 1939425007.5 L]

SARA 311/312

Classification : Not applicable.

SARA 313

This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

State regulations

Massachusetts : The following components are listed: OIL MIST, MINERAL
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.
Illinois : None of the components are listed.

Inventory list

Australia inventory (AIC) : All components are listed or exempted.
Canada inventory (DSL-NDSL) : Restrictions Apply
China inventory (IECSC) : All components are listed or exempted.
Japan inventory (CSCL) : All components are listed or exempted.
Japan inventory (Industrial Safety and Health Act) : All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : All components are listed or exempted.
Korea inventory (KECI) : All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI) : All components are listed or exempted.
United States inventory (TSCA 8b) : All components are active or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Section 16. Other information



Procedure used to derive the classification

Not classified.

New Jersey Right to Know Disclosure

Name	CAS #
Petroleum Oil (Lubricant)	

History

Date of issue/Date of revision : 30 August 2024

Date of previous issue : 28 November 2023

Version : 1.01

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Product code : 20156010Q040_1228252

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SAFETY DATA SHEET



MOBILFLUID 424

Section 1. Identification

Product name : MOBILFLUID 424
Product description : base oil and additives

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Hydraulic fluid, Manual transmission fluid
Uses advised against : This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

Supplier : EXXON MOBIL CORPORATION
22777 Springwoods Village Parkway
Spring, TX 77389 USA

24-Hour emergency telephone number : 1-800-424-9300 / +1 703-741-5970 / +1-703-527-3887 (CHEMTREC)

Product Technical Information : 800-662-4525

SDS Internet Address : www.sds.exxonmobil.com

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

Hazards not otherwise classified : None known.

Note : This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% by weight	Identifiers
solvent dewaxed heavy paraffinic distillate	≥50 - ≤75	CAS: 64742-65-0
hydrotreated light naphthenic distillate (petroleum)	≤3	CAS: 64742-53-6
zinc alkyl dithiophosphate	≤3	CAS: 68649-42-3
c14-18 alpha-olefin epoxide, reaction products with boric acid	<1	Proprietary

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Pressurized mists may form a flammable mixture.
- Hazardous combustion products** : Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, sulfur oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Use standard firefighting procedures and consider the hazards of other involved materials. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Assure an extended cooling down period to prevent re-ignition. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** :  Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** :  Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** :  Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Confine the spill immediately with booms. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Warn other shipping. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** :  Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Static Accumulator

: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
solvent dewaxed heavy paraffinic distillate	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
catalytic de waxed heavy paraffinic oil (petroleum)	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
hydrotreated light naphthenic distillate (petroleum)	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.
zinc alkyl dithiophosphate	None.
severely hydrotreated heavy paraffinic distillate	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m ³ . Form: Mist. STEL 15 minutes: 10 mg/m ³ . Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m ³ . ACGIH TLV (United States, 1/2024) [Mineral Oil, pure, highly and severely refined] TWA 8 hours: 5 mg/m ³ . Form: Inhalable fraction.

Section 8. Exposure controls/personal protection

c14-18 alpha-olefin epoxide, reaction products with boric acid	None.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** :  Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Amber
- Odor** : Characteristic
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : >315.56°C (>600°F)

Section 9. Physical and chemical properties and safety characteristics

Flash point	:  Open cup: >200°C (>392°F) [ASTM D-92]
Evaporation rate	: Not available.
Flammability	: Ignitable
Lower and upper explosion limit/flammability limit	: Lower: 0.9% Upper: 7%
Vapor pressure	: <0.1 mm Hg [20 °C]
Relative vapor density	: >2 [Air = 1]
Relative density	:  0.884 [ASTM D4052]
Solubility in water	: Negligible
Partition coefficient: n-octanol/water	: >3.5
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	:  55 cSt [40 °C] [ASTM D 445] 9.5 cSt [100 °C] [ASTM D 445]

Particle characteristics

Median particle size	: Not applicable.
Pour point	:  -36°C [ASTM D 97]
DMSO Extract (mineral oil only), IP-346	: <3 % by weight

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: High energy sources of ignition. Excessive heat.
Incompatible materials	: Strong oxidizers
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary

Inhalation	: Minimally Toxic. No end point data for material. Based on assessment of the components.
Dermal	: Minimally Toxic. No end point data for material. Based on assessment of the components.
Oral	: Minimally Toxic. No end point data for material. Based on assessment of the components.

Irritation/Corrosion

Conclusion/Summary

Skin	: Negligible irritation to skin at ambient temperatures. No end point data for material. Based on assessment of the components.

Section 11. Toxicological information

Eyes : May cause mild, short-lasting discomfort to eyes. No end point data for material. Based on assessment of the components.

Respiratory : Negligible hazard at ambient/normal handling temperatures. No end point data for material.

Respiratory or skin sensitization

Conclusion/Summary

Skin : Not expected to be a skin sensitizer. No end point data for material. Based on assessment of the components.

Respiratory : Not expected to be a respiratory sensitizer. No end point data for material.

Mutagenicity

Conclusion/Summary : Not expected to be a germ cell mutagen. No end point data for material. Based on assessment of the components.

Carcinogenicity

Conclusion/Summary : Not expected to cause cancer. No end point data for material. Based on assessment of the components.

Reproductive toxicity

Conclusion/Summary : Not expected to be a reproductive toxicant. No end point data for material. Based on assessment of the components.

Specific target organ toxicity (single exposure)

Conclusion/Summary : Not expected to cause organ damage from a single exposure. No end point data for material.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Target organs
MOBILFLUID 424	Not applicable.	-

Conclusion/Summary : Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

Aspiration hazard

Conclusion/Summary : Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. Data available.

Other information

Contains : Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

Section 12. Ecological information

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

Toxicity

Conclusion/Summary

Acute toxicity : Not expected to be harmful to aquatic organisms.

Chronic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Biodegradability : Base oil component -- Expected to be inherently biodegradable

Bioaccumulative potential

Conclusion/Summary : Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Mobility in soil

Mobility : Base oil component -- Expected to partition to sediment and wastewater solids. Low solubility and floats and is expected to migrate from water to the land.

Section 12. Ecological information

Other ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.**

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Label(s) / Marks				
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** zinc alkyl dithiophosphate; siloxanes and silicones, di-me
TSCA 8(a) CDR Exempt/Partial exemption: At least one component is not listed.
Clean Water Act (CWA) 307: zinc alkyl dithiophosphate; toluene; benzene
Clean Water Act (CWA) 311: toluene; maleic anhydride; benzene

TSCA 12(b) - Chemical export notification

Not applicable.

Section 15. Regulatory information

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc alkyl dithiophosphate	68649-42-3	≤3
Supplier notification	zinc alkyl dithiophosphate	68649-42-3	≤3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: OIL MIST, MINERAL; MINERAL OIL, PETROLEUM PARAFFIN OILS, CATALYTIC DEWAXED HEAVY; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC; OIL MIST, MINERAL
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: ZINC compounds
- Pennsylvania** : The following components are listed: ZINC COMPOUNDS
- Illinois** : None of the components are listed.

Inventory list

- Australia inventory (AIC)** : All components are listed or exempted.
- Canada inventory (DSL-NDSL)** : All components are listed or exempted.
- China inventory (IECSC)** : All components are listed or exempted.
- Japan inventory (CSCL)** : All components are listed or exempted.
- Japan inventory (Industrial Safety and Health Act)** : All components are listed or exempted.
- New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.
- Philippines inventory (PICCS)** : All components are listed or exempted.
- Korea inventory (KECI)** : All components are listed or exempted.
- Taiwan Chemical Substances Inventory (TCSI)** : All components are listed or exempted.
- United States inventory (TSCA 8b)** : All components are active or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Not classified.

New Jersey Right to Know Disclosure

Name	CAS #
Petroleum Oil (Lubricant) zinc alkyl dithiophosphate	68649-42-3

History

Date of issue/Date of revision : 26 December 2024

Date of previous issue : 16 August 2024

Version : 1.03

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Product code : 201520508030_1159586

Notice to reader

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Section 16. Other information

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MORTON SALT, INC.

Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

• Common Salt without Additives

Synonyms

- All Purpose Natural Sea Salt
- All Purpose Purex Salt
- Bunny Spool (Plain Salt)
- California Pure Coarse Sea Salt
- California Pure Fine Sea Salt
- California Pure Medium Sea Salt
- Canning & Pickling Salt
- Commercial Grade, Water Softening Pellets
- Culinox 999 Chemical Grade Salt
- Culinox 999 Fine Salt
- Culinox 999 Food Grade Salt;
- Evaporated Granulated Salt
- Evaporated Salt Pellets
- Feed Mixing Salt
- Northern Rock, F & R
- Fine Mixing Salt
- Hi-Purity Super Soft Salt Extra Coarse Crystals
- H.G. Blending Salt
- Hay & Stock Salt, F&R
- Industrial Crude Solar Salt
- ISCO Crystals, Bulk
- ISCO Medium, Bulk
- ISCO Water Conditioning, Bulk
- KD Crude Solar Salt
- KD Industrial Salt
- Kleer Fine Salt
- Kleer Granulated Salt
- Mill Run Salt
- Natural Coarse Sea Salt
- Northern Fine +20 Rock Salt
- Plain Salt Block
- Plain Salt Brick
- Pool Salt
- Premium Salt Pellets
- Professional's Choice Pool Salt
- PureSun Culinary Crystals
- Purex Salt
- Purex Select Salt
- Reagent Grade Sodium Chloride
- Refined Sea Salt
- Rock Pretzel Salt
- Rock Salt for Making Ice Cream
- Safe-T-Salt (bagged w/o YPS)
- Sea Salt Grinder
- Sea Salt Grinder Refill
- Select Extra Coarse Rock Salt
- Service Pack Salt (all)
- Ship n' Shore Rock Salt
- Solar Salt Water Softening Crystals
- Stock Salt
- USP Sodium Chloride
- Valu-Soft Solar Salt
- Water Softening Salt (Undried) Coarse
- Water Softening Salt (Undried) Extra Coarse
- White Crystal Brine Block (50 lb.)
- White Crystal Rock Salt (all)
- White Crystal Solar Salt (all)
- White Crystal Water Softening Solar Salt (all)

CAS Number • 7647-14-5

Product Code • MSDS Code: 100

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Food, Chemical and Drug Processing; Pharmaceuticals; Water Conditioning; Ice Control; Chemical Feedstock
– see product data sheets for more information

1.3 Details of the supplier of the safety data sheet

Manufacturer • Morton Salt, Inc.
123 N. Wacker Drive
Chicago, IL 60606
United States

saltinfo@mortonsalt.com

Telephone • 312-807-2000
(General)

1.4 Emergency telephone number

Manufacturer • 312-807-2000

Section 2: Hazards Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Classification criteria not met

DSD/DPD • Classification criteria not met

2.2 Label Elements

CLP

Hazard statements • No label element(s) specifically required

DSD/DPD

Risk phrases • No label element(s) specifically required

2.3 Other Hazards

CLP • According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.

DSD/DPD • This product is not considered dangerous under the European Directive 67/548/EEC

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Classification criteria not met

2.2 Label elements

OSHA HCS 2012

Hazard statements • No label element(s) specifically required

2.3 Other hazards

OSHA HCS 2012 • This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS • Classification criteria not met

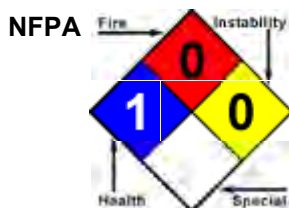
2.2 Label elements

WHMIS • No label element(s) specifically required

2.3 Other hazards

WHMIS • In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information



See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

Non-Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Sodium chloride	CAS:7647-14-5 EC Number:231-598-3	> 99%	Ingestion/Oral-Rat LD50 • 3000 mg/kg	EU DSD/DPD: Not Classified - Criteria not met EU CLP: Not Classified - Criteria not met OSHA HCS 2012: Not Classified - Criteria not met	May contain small quantities of naturally occurring calcium and magnesium salts

3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation** • Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
- Skin** • IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- Eye** • In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion** • If large quantities are swallowed, call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician** • All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- Material is non-combustible. In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media

- No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- No unusual fire or explosion hazards known.

Hazardous Combustion Products

- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Wear suitable protective clothing, gloves, and eye/face protection.

Emergency Procedures

- Stop leak if you can do it without risk. Keep unauthorized personnel away. Use normal clean up procedures.

6.2 Environmental precautions

- None expected to be necessary if material is used under ordinary conditions and as recommended.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use good safety and industrial hygiene practices. Wash thoroughly after handling. Keep out of reach of children.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Avoid storage with strong acids and strong oxidizing agents.

Incompatible Materials or Ignition Sources

- Strong oxidizing agents, strong acids.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines • No applicable exposure limits available for product or components.

8.2 Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Pictograms



Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear appropriate gloves.

General Industrial Hygiene Considerations

- Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description

Physical Form	Solid	Appearance/Description	Colorless to white crystalline or compressed block/pellet.
Color	Colorless to White.	Odor	Odorless
Particulate Type	Dust Crystalline	Particulate Size	Variable
Odor Threshold	Data lacking		

General Properties

Boiling Point	1413 to 1461 C(2575.4 to 2661.8 F)	Melting Point	801 C(1473.8 F)
Decomposition Temperature	Data lacking	pH	7 Approximately
Specific Gravity/Relative Density	2.165 Water=1	Bulk Density	Variable
Water Solubility	Soluble 0.36 g/cc @ 20 C(68 F)	Viscosity	Not relevant
Explosive Properties	Not relevant.	Oxidizing Properties:	Not relevant.

Volatility

Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant		

Flammability

Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not flammable.		

Environmental

Octanol/Water Partition coefficient	Not relevant		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Incompatible materials.

10.5 Incompatible materials

- Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products

- Will react with strong acids to generate hydrogen chloride and with strong oxidizing agents to generate chlorine gas.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Sodium chloride (> 99%)	7647-14-5	Acute Toxicity: orl-rat LD50:3000 mg/kg
GHS Properties		Classification
Acute toxicity		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Aspiration Hazard		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Carcinogenicity		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Germ Cell Mutagenicity		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Skin corrosion/Irritation		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Skin sensitization		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
STOT-RE		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
STOT-SE		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Toxicity for Reproduction		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Respiratory sensitization		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met
Serious eye damage/Irritation		EU/CLP •Classification criteria not met OSHA HCS 2012 •Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected. Inhalation of dust may cause mild irritation to mucous membranes, nose and throat. Symptoms may include coughing, dryness and sore throat.

Chronic (Delayed)

- No data available.

Skin

Acute

- Under normal conditions of use, no health effects are expected.

(Immediate)

**Chronic
(Delayed)**

- No data available.

Eye

**Acute
(Immediate)**

- Based upon practical use and experience using this product eye irritation is not expected to occur.

**Chronic
(Delayed)**

- No data available.

Ingestion

**Acute
(Immediate)**

- Ingestion may cause the following symptoms - diarrhea.

**Chronic
(Delayed)**

- No data available.

Key to abbreviations

LD = Lethal Dose

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA

IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- None

State Right To Know				
Component	CAS	MA	NJ	PA
Sodium chloride	7647-14-5	No	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Sodium chloride	7647-14-5	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Sodium chloride	7647-14-5	Yes	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Sodium chloride 7647-14-5 > 99% Uncontrolled product according to WHMIS classification criteria

Canada - WHMIS - Ingredient Disclosure List

- Sodium chloride 7647-14-5 > 99% Not Listed

Environment

Canada - CEPA - Priority Substances List

- Sodium chloride 7647-14-5 > 99% Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

- Sodium chloride 7647-14-5 > 99% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

- Sodium chloride 7647-14-5 > 99% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

- Sodium chloride 7647-14-5 > 99% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

- Sodium chloride 7647-14-5 > 99% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

- Sodium chloride 7647-14-5 > 99% Not Listed

Mexico

Other

Mexico - Hazard Classifications

- Sodium chloride 7647-14-5 > 99% Not Listed

Mexico - Regulated Substances

- Sodium chloride 7647-14-5 > 99% Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - OSHA - Specifically Regulated Chemicals**
- Sodium chloride 7647-14-5 > 99% Not Listed

Environment

- U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Section 313 - Emission Reporting**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**
- Sodium chloride 7647-14-5 > 99% Not Listed

United States - California

Environment

- U.S. - California - Proposition 65 - Carcinogens List**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - California - Proposition 65 - Developmental Toxicity**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - California - Proposition 65 - Reproductive Toxicity - Female**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - California - Proposition 65 - Reproductive Toxicity - Male**
- Sodium chloride 7647-14-5 > 99% Not Listed

United States - Pennsylvania

Labor

- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**
- Sodium chloride 7647-14-5 > 99% Not Listed
- U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances**
- Sodium chloride 7647-14-5 > 99% Not Listed

United States - Rhode Island

Labor

- U.S. - Rhode Island - Hazardous Substance List**
- Sodium chloride 7647-14-5 > 99% Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date • 17/November/2015

Preparation Date • 17/November/2015

Disclaimer/Statement of Liability • The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice

procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations. Nothing contained herein is to be construed as a recommendation for use in violation of any patents or of applicable laws or regulations.

Key to abbreviations

NDA = No data available



SAFETY DATA SHEET

1. Identification

Product identifier	New Generation™ Wheel Bearing Grease for Disc and Drum Brakes - (can) - 14 oz
Other means of identification	
Product Code	No. SL3111 (Item# 1007854)
Recommended use	Wheel bearing grease for disc and drum brakes
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use. Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
residual oils (petroleum), solvent-refined		64742-01-4	45 - 70
distillates (petroleum), solvent-dewaxed heavy paraffinic		64742-65-0	10 - 30
distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	5 - 10

Chemical name	Common name and synonyms	CAS number	%
2,6-di-tert-butyl-p-cresol		128-37-0	≤ 0.3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	The product is immiscible with water and will spread on the water surface. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination. Wipe up with absorbent material (e.g. cloth, fleece).
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
2,6-di-tert-butyl-p-cresol (CAS 128-37-0)	TWA	10 mg/m3	
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves such as: Neoprene. Nitrile.

Other

Wear suitable protective clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Solid, Liquid.

Form

Grease.

Color

Amber.

Odor

Petroleum.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point	Not available.
Initial boiling point and boiling range	640.4 °F (338 °C)
Flash point	471.2 °F (244.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	0.007 hPa estimated
Vapor density	Not available.
Relative density	0.9 (68 °F (20 °C))
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 599 °F (> 315 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Percent volatile	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Based on available data, the classification criteria are not met.
Skin contact	Based on available data, the classification criteria are not met.
Eye contact	Based on available data, the classification criteria are not met.
Ingestion	Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity	Not classified.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)	3 Not classifiable as to carcinogenicity to humans.
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	3 Not classifiable as to carcinogenicity to humans.
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	No data available.
Partition coefficient n-octanol / water (log Kow)	
2,6-di-tert-butyl-p-cresol	5.1
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
SARA 304 Emergency release notification	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

US state regulations**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)
distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS 64742-65-0)
residual oils (petroleum), solvent-refined (CAS 64742-01-4)

US. New Jersey Worker and Community Right-to-Know Act

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

US. Massachusetts RTK - Substance List

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

US. Pennsylvania Worker and Community Right-to-Know Law

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

US. Rhode Island RTK

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

Volatile organic compounds (VOC) regulations**EPA**

VOC content (40 CFR 51.100(s)) < 0.1 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products Not regulated

VOC content (CA) < 0.1 %

VOC content (OTC) < 0.1 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	04-12-2022
Prepared by	Danica Fulmer
Version #	01
Disclaimer	The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..
Revision information	This document has undergone significant changes and should be reviewed in its entirety.

Safety Data Sheet

Date Printed: 19-Oct-2021

Version: A

1. IDENTIFICATION

Product Identifier: NO.71
Product Name: EPOXY THINNER NO.71
Other means of Identification
SDS#: NO.71 SDS
Customer and Customer Product Code: 4473 AZZ Central Electric Mfg. Company CE1251
UN/ID No.: UN 1263

Recommended use of the product and restrictions on use

Recommended Use: Protective Coating.

Details of the supplier of the safety data sheet

Supplier Address

Wilko Paint, Inc.
2727 Ohio St.
P.O. Box 4089
Wichita, KS 67204

Emergency Telephone Number

Company Phone Number: Toll Free: **1-800-658-3799**

Emergency Telephone (24 hr): Chemtrec: **1-800-424-9300**

2. HAZARDS IDENTIFICATION

Physical State: Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Flammable Liquids	Category 2

Signal Word

Danger



Hazard Statements

- Flammable liquid and vapor.
 - Harmful if swallowed.
 - Causes skin irritation.
 - Causes serious eye damage.
 - May cause respiratory irritation.
 - May cause drowsiness or dizziness.
- Other: Harmful if ingested or inhaled. See Sections 8 and 16 for more information.

Precautionary Statements - Prevention

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

This product contains an ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected carcinogens. As with any chemicals, ashtmatic sensitization can occur from single or repeated exposure. Strict observation of exposure limits is essential (See Section 8).

Precautionary Statements - Response

- If exposed or concerned: Get medical advice/attention.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary Statements - Storage

Store locked up and out of reach of children, in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	CAS No	Weight - %
Isopropyl Benzene (Cumene)	98-82-8	0-21
METHYL ISOBUTYL KETONE	108-10-1	35-40
XYLOL / XYLENE	1330-20-7	30-35
N-BUTYL ALCOHOL	71-36-3	15-20
ETHYLBENZENE	100-41-4	05-10

** If chemical name is "proprietary" or CAS No. is blank, and weight % is zero or listed as a range, then the specific chemical identity and/or percentage of composition is withheld as a trade secret and any exposure limits is listed in Section 8.

4. FIRST AID MEASURES

First Aid Measures

- **General Advice** If exposed or concerned: Get medical advice/attention.
- **Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- **Skin Contact** Take off contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before reuse.
- **Inhalation** Remove to fresh air. If not breathing, give artificial respiration.
- **Ingestion** Do not induce vomiting. Call a physician.

Most important symptoms and effects May cause skin and eye irritation. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Loss of coordination.

Indication of any immediate medical attention and special treatment needed Loss of consciousness, fainting. Blurry or loss of vision.

Notes to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION

FLAMMABLE LIQUID - NFPA CLASS 3 - Flammable liquid flash point below 100 °F.

SUITABLE EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam.

SPECIAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus must be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Use personal protective equipment as required.
- Prevent further leakage or spillage if safe to do so.
- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

- Obtain speed

- Keep cont

8. EXPOSURE CONTROLS/PERSONAL

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

NO person should use this product, or be in the area

- Use only with adequate ventilation.
- Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

- ## EXPOSURE LIMITS

[illegible]

NO. 71 SDS

Appropriate engineering controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear goggles or safety glasses with unperforated side shields.
Skin and Body Protection	Use solvent resistant gloves and apron or suitable protective clothing, additional use of barrier cream is recommended.
Respiratory Protection	Apply in a spray booth with ventilation that is adequate to keep the TWA TLV below the stated limits as stated in the Section 8 table, otherwise use a positive pressure air supplied respirator (TL19C NIOSH/MSHA approved). If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 8 may be used as long as the TWA TLV are below stated limits. Follow respirator manufacturer's directions for use. Wear the respirator for the duration of spraying and until all vapors and mists are gone. ALL PERSONELL IN THE AREA WHERE THIS PRODUCT IS BEING USED MUST BE EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. Wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive, when sanding or abrading dried film.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

OTHER PRECAUTIONS

If this product is to be mixed with other components before use, read and follow warning labels on all components.

Intentional misuse by deliberately concentrating and inhaling the vapors can be harmful or fatal.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid		
Appearance	Paint	Odor	Not determined
Color	See description	Odor Threshold	Not determined
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	113-153 °C / 236-307 °F		
Flash Point	16 °C / 60 °F		
Evaporation Rate	Slower Than Ether		
Flammability (Solid, Gas)	N/A - Liquid		
Upper Explosive Limit (UEL)	Not determined		
Lower Explosive Limit (LEL)	1.00 %		
Flammability Limit Vapor	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Heavier than air		
Specific Gravity	0.83		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient Auto-	Not determined		
Ignition Temperature	Not determined		
Decomposition	Not determined		
Temperature Kinematic	Not determined		
Viscosity Dynamic	Not determined		
Viscosity	Not determined		
VOC	6.92 #/gal or 830 gr/li		EPA Method 24
VOC Actual	6.92 #/gal or 830 gr/li		Total VOC per gallon, as supplied
Wt/Gal	6.92 #/gal		

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions.

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Avoid all possible sources of ignition.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

There is no specific data available for this product.

12. ECOLOGICAL INFORMATION

There is no specific data available for this product.

CAUTION: Can be toxic to living organisms. Keep out of soil and water stream.

ECOTOXICITY EFFECTS: Harmful to aquatic life with long lasting effects.

MOBILITY: Not available

BIOACCUMULATIVE POTENTIAL: Not available

PERSISTENCE / DEGRADABILITY: Not available

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Disposal should be in accordance with applicable regional, national and local laws and regulations. Only EPA approved facility must handle incineration if this method of disposal is chosen.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations (Refer to above).

14. TRANSPORT INFORMATION

NOTE

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II

IATA

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II

IMDG

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

There is no specific data available for this product.

16. OTHER INFORMATION

NFPA	Health Hazards 2*	Flammability 3	Instability 1	Special Hazards Not Determined
HMIS	Health Hazards *2	Flammability 3	Physical Hazards 1	Personal Protection J,X**

Chronic Hazard Star Legend
Personal Protection

*2=Chronic Health Hazard.

**J=Goggles, impermeable gloves, apron and vapor respirator required.

X=See your supervisor for guidance.

Issue Date:

Revision Date: 13-July-2021

Version: A

Revision Note: SDS format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : NO. 7

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Manufacturer

RectorSeal, LLC
2601 Spenwick Drive
Houston, Texas 77055
USA
T (800)-231-3345 or (713)263-8001
www.rectorseal.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week
Within USA and Canada: 1.800.424.9300
Outside USA and Canada: +1.703.527.3887
(collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Respiratory sensitization, Category 1	H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 1B	H350	May cause cancer
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H226 - Flammable liquid and vapor
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H336 - May cause drowsiness or dizziness
H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P284 - [In case of inadequate ventilation] wear respiratory protection.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P304+P341 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ethyl acetate	CAS-No.: 141-78-6	20 – 40	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
4-hydroxy-4-methyl-2-pentanone	CAS-No.: 123-42-2	17.2161 – 17.39	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:vapour), H331 Eye Irrit. 2, H319
4,4'-Diphenylmethane Diisocyanate	CAS-No.: 101-68-8	2.8444512 – 4.740752	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
2,4-Toluene Diisocyanate	CAS-No.: 584-84-9	0.255553903 44 – 0.425923172 4	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS US classification
2,6-Toluene Diisocyanate	CAS-No.: 91-08-7	0.063888475 86 – 0.106480793 1	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard	: Flammable liquid and vapor.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

NO. 7	
No additional information available	
2,4-Toluene Diisocyanate (584-84-9)	
No additional information available	
2,6-Toluene Diisocyanate (91-08-7)	
No additional information available	
4,4'-Diphenylmethane Diisocyanate (101-68-8)	
No additional information available	
ethyl acetate (141-78-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethyl acetate
ACGIH OEL TWA [ppm]	400 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl acetate
OSHA PEL (TWA) [1]	1400 mg/m³
OSHA PEL (TWA) [2]	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Diacetone alcohol
ACGIH OEL TWA [ppm]	50 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr
Regulatory reference	ACGIH 2021

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-hydroxy-4-methyl-2-pentanone (123-42-2)				
USA - OSHA - Occupational Exposure Limits				
Local name		Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)		
OSHA PEL (TWA) [1]		240 mg/m³		
OSHA PEL (TWA) [2]		50 ppm		
Regulatory reference (US-OSHA)		OSHA Annotated Table Z-1		
8.2. Appropriate engineering controls				
Appropriate engineering controls		: Ensure good ventilation of the work station.		
Environmental exposure controls		: Avoid release to the environment.		
8.3. Individual protection measures/Personal protective equipment				
Materials for protective clothing:				
Wear protective clothing				
Hand protection:				
Neoprene or nitrile rubber gloves				
Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	> 0.6 mm	
Eye protection:				
Wear eye protection				
Skin and body protection:				
Wear suitable protective clothing				
Respiratory protection:				
No respiratory protection needed under normal use conditions				

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Pasty liquid.
Color	: Black
Odor	: Mild odor
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: 161 °C @ 760 mmHg
Boiling point	: No data available
Flash point	: 25 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0.3 @ 20°C
Relative vapor density at 20°C	: 1.1
Relative density	: No data available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: > 23 mm²/s
Viscosity, dynamic	: No data available

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

VOC content : 28 % Theoretical value

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

2,4-Toluene Diisocyanate (584-84-9)

ATE US (dust, mist)	0.05 mg/l/4h

2,6-Toluene Diisocyanate (91-08-7)

ATE US (dust, mist)	0.05 mg/l/4h

4,4'-Diphenylmethane Diisocyanate (101-68-8)

ATE US (dust, mist)	1.5 mg/l/4h

ethyl acetate (141-78-6)

LD50 oral rat	10200 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 oral	4940 mg/kg
LD50 dermal rabbit	> 20000 mg/kg body weight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat (Vapours)	49.9 mg/l/4h
ATE US (oral)	4940 mg/kg body weight
ATE US (vapors)	49.9 mg/l/4h

4-hydroxy-4-methyl-2-pentanone (123-42-2)

LD50 oral rat	3002 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 2738 - 3290
LD50 oral	4000 mg/kg
LD50 dermal rat	> 1875 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 1875 mg/kg Source: ECHA
LC50 Inhalation - Rat (Vapours)	≥ 7.6 mg/l Source: ECHA
ATE US (oral)	3002 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
ATE US (vapors)	3 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
2,4-Toluene Diisocyanate (584-84-9)	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
2,6-Toluene Diisocyanate (91-08-7)	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
4,4'-Diphenylmethane Diisocyanate (101-68-8)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
2,4-Toluene Diisocyanate (584-84-9)	
STOT-single exposure	May cause respiratory irritation.
2,6-Toluene Diisocyanate (91-08-7)	
STOT-single exposure	May cause respiratory irritation.
4,4'-Diphenylmethane Diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.
ethyl acetate (141-78-6)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
4,4'-Diphenylmethane Diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
ethyl acetate (141-78-6)	
LOAEL (oral, rat, 90 days)	3600 mg/kg body weight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
NOAEL (oral, rat, 90 days)	900 mg/kg body weight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
LOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapor, 90 days)	≥ 4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
Aspiration hazard	: Not classified
Viscosity, kinematic	: > 23 mm²/s
ethyl acetate (141-78-6)	
Viscosity, kinematic	0.489 mm²/s (25 °C)

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Viscosity, kinematic	1.966 mm ² /s
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after inhalation	: May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

ethyl acetate (141-78-6)	
LC50 - Fish [1]	230 mg/l
EC50 - Crustacea [1]	2500 mg/l
NOEC (chronic)	2.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

ethyl acetate (141-78-6)	
Not rapidly degradable	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O ₂ /g substance
Chemical oxygen demand (COD)	1.69 g O ₂ /g substance
ThOD	1.82 g O ₂ /g substance
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.07 g O ₂ /g substance
Chemical oxygen demand (COD)	2.11 g O ₂ /g substance
ThOD	2.21 g O ₂ /g substance

12.3. Bioaccumulative potential

ethyl acetate (141-78-6)	
BCF - Fish [1]	30 (3 day(s), Leuciscus idus, Static system, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Partition coefficient n-octanol/water (Log Pow)	1.9 (Read-across, Equivalent or similar to OECD 117)

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
ethyl acetate (141-78-6)	
Surface tension	0.024 N/m (20 °C)
Ecology - soil	Low potential for adsorption in soil.
4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Ecology - soil	Low potential for adsorption in soil.
12.5. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
1993	UN1993	1993	1993
14.2. Proper Shipping Name			
Flammable liquids, n.o.s. (MIXTURE)	FLAMMABLE LIQUID, N.O.S. (MIXTURE)	FLAMMABLE LIQUID, N.O.S. (MIXTURE)	Flammable liquid, n.o.s. (MIXTURE)
Transport document description			
UN1993 Flammable liquids, n.o.s. (MIXTURE), 3, III	UN1993 FLAMMABLE LIQUID, N.O.S. (MIXTURE), 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S. (MIXTURE), 3, III	UN 1993 Flammable liquid, n.o.s. (MIXTURE), 3, III
14.3. Transport hazard class(es)			
3	3	3	3
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			
14.6. Special precautions for user			
DOT			
UN-No.(DOT)		: UN1993	

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG)	: UN1993
TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 60 L
Emergency Response Guide (ERG) Number	: 128

IMDG

Special provision (IMDG)	: 223, 274, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG)	: A

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provision (IATA)	: A3
ERG code (IATA)	: 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

2,4-Toluene Diisocyanate	CAS-No. 584-84-9	0.25555390344 – 0.4259231724%
2,6-Toluene Diisocyanate	CAS-No. 91-08-7	0.06388847586 – 0.1064807931%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

2,4-Toluene Diisocyanate	CAS-No. 584-84-9	0.25555390344 – 0.4259231724%
2,6-Toluene Diisocyanate	CAS-No. 91-08-7	0.06388847586 – 0.1064807931%
4,4'-Diphenylmethane Diisocyanate	CAS-No. 101-68-8	2.8444512 – 4.740752%

2,4-Toluene Diisocyanate (584-84-9)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

2,6-Toluene Diisocyanate (91-08-7)

CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4,4'-Diphenylmethane Diisocyanate (101-68-8)	
Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	5000 lb

ethyl acetate (141-78-6)	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

2,4-Toluene Diisocyanate (584-84-9)	
Listed on the Canadian DSL (Domestic Substances List)	

2,6-Toluene Diisocyanate (91-08-7)	
Listed on the Canadian DSL (Domestic Substances List)	

4,4'-Diphenylmethane Diisocyanate (101-68-8)	
Listed on the Canadian DSL (Domestic Substances List)	

ethyl acetate (141-78-6)	
Listed on the Canadian DSL (Domestic Substances List)	

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Listed on the Canadian DSL (Domestic Substances List)	

EU-Regulations

2,4-Toluene Diisocyanate (584-84-9)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

2,6-Toluene Diisocyanate (91-08-7)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

4,4'-Diphenylmethane Diisocyanate (101-68-8)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

ethyl acetate (141-78-6)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations

2,4-Toluene Diisocyanate (584-84-9)

Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

2,6-Toluene Diisocyanate (91-08-7)

Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

4,4'-Diphenylmethane Diisocyanate (101-68-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

ethyl acetate (141-78-6)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

4-hydroxy-4-methyl-2-pentanone (123-42-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

15.3. US State regulations

 **WARNING:** This product can expose you to Methyl isobutyl ketone, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
2,4-Toluene Diisocyanate(584-84-9)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS); U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
2,6-Toluene Diisocyanate(91-08-7)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

NO. 7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	State or local regulations
4,4'-Diphenylmethane Diisocyanate(101-68-8)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
ethyl acetate(141-78-6)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Methyl isobutyl ketone(108-10-1)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
4-hydroxy-4-methyl-2-pentanone(123-42-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
graphite(7782-42-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
quartz, 1%≤conc respirable crystalline silica<10%(14808-60-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
talc(14807-96-6)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
magnesium carbonate(546-93-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 8/22/2023

Full text of H-phrases	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

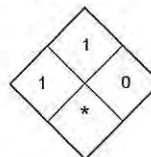
Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

MATERIAL SAFETY DATA SHEET

Norit MSDS No. 103
Revision Date: April 1, 2010
Revision No. 06

NFPA HAZARD SYMBOL*



4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant
*-See Section 16 for
Special Hazards

Norit Activated Carbons

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Norit Americas Inc.

3200 West University Avenue

Marshall, TX 75670

Emergency Telephone Numbers:

Chem-tel (800) 255-3924 (24 hour)

Sales Office (800) 641-9245

Marshall Plant (903) 923-1000

Names used on product labels:

DARCO® KB
DARCO® KB-B
NORIT® CAE

DARCO® KB-FF
DARCO® KB-FG
DARCO® KB-G

DARCO® KB-M
DARCO® KB-WJ
DARCO® KB-80

DARCO® KB-100
DARCO® K150

DARCO® and NORIT® are registered trademarks of Norit Americas Inc. This MSDS covers all the KB products with the same activation.

Chemical Name • Activated Carbon

Product Use • Liquid and vapor applications (purification, decolorization, separation, and deodorization)

2. COMPOSITION / INFORMATION ON INGREDIENTS

IDENTITY	CAS NO.	%
Activated Carbon	7440-44-0	100

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Odorless black powder. **Activated carbon (especially when wet) can deplete oxygen from air in enclosed spaces, and dangerously low levels of oxygen may result.** When workers enter a vessel containing activated carbon, procedures for potentially low oxygen areas should be followed. Workers should also take appropriate precautions when dealing with spent (used) activated carbons, which may exhibit properties of adsorbed materials.

This material may be self-heating under certain conditions. See Section 16.

POTENTIAL HEALTH EFFECTS:

Medical conditions aggravated by exposure: None documented

Routes of Exposure:

- Eyes: • Not corrosive, but like most particulate materials, may cause mild physical irritation.
- Skin: • Not corrosive and not a primary skin irritant. Mild irritation is possible due to abrasive action of dust.
- Ingestion: • No known deleterious effects.
- Inhalation: • Possible mild irritation of respiratory tract due to drying and abrasive actions of dust.
- Chronic Effects: • IARC: Not listed • NTP: Not listed • OSHA: Not regulated

For additional information, see Section 16.

4. FIRST AID MEASURES

- Skin: • Wash material off the skin with soap and water. Seek medical attention if irritation occurs.
- Eyes: • Flush with copious amounts of water. Seek medical attention if irritation occurs.
- Ingestion: • Give one or two glasses of water to drink. Seek medical attention if gastrointestinal symptoms develop.
- Inhalation: • Remove to fresh air. Seek medical attention if cough or respiratory symptoms develop.
-

5. FIRE FIGHTING MEASURES

- Flashpoint • Not Applicable.
- Non-flammable • OSHA Method 16CFR1500.44 (Incorporated by reference in 29CFR1910.1200).
- Self-heating substance • May self heat. UN Manual of Tests and Criteria, Test N.3.
- Flammability Limits in Air • LFL and UFL Not Applicable.

GENERAL HAZARD:

Activated carbon is difficult to ignite and tends to burn slowly (smolder) without producing smoke or flame. Toxic gas may form upon combustion. Chemically activated carbons can self-heat under certain conditions.

FIRE FIGHTING INSTRUCTIONS:

If possible to do safely, move smoldering activated carbon to a non-hazardous area, preferably out of doors. Extinguish fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.

FIRE FIGHTING EQUIPMENT:

Fire fighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

HAZARDOUS COMBUSTION PRODUCTS:

Products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smolder for long periods in enclosed spaces, may produce amounts of carbon monoxide, which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air). Under certain conditions, any airborne dust may be an explosion hazard. Used activated carbon may produce additional combustion products.

6. ACCIDENTAL RELEASE MEASURES

IF A SPILL OR LEAK OCCURS:

Clean up spills in a manner that does not disperse dust into the air. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal of material from eyes, skin, and clothing.

DISPOSAL METHOD:

Dispose of virgin (unused) carbon (waste or spillage) in a facility permitted for non-hazardous wastes. Spent (used) carbon should be disposed of in accordance with applicable laws.

CONTAINER DISPOSAL:

Do not reuse empty bags. Dispose of used bags in facility permitted for non-hazardous wastes.

7. HANDLING AND STORAGE

- Storage Temperature: • Ambient. Avoid storing at high temperatures in direct sunlight.
- Storage Pressure: • Atmospheric
- Handling: • Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces.
- Use with adequate exhaust ventilation to draw dust away from workers' breathing zones.
- Prevent or minimize exposures to dusts by using appropriate respirators, gloves, and eye protection.
- Wash exposed skin areas thoroughly with soap and water after handling.
- Storage: • Product should be stored in a closed dry container. Maintain good housekeeping procedures. Store this product away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. Avoid storing at high temperatures in direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering Controls:
 - Use local exhaust ventilation to control emissions near the source. Ventilation systems should be sized and configured to prevent exceedence of recommended or regulated exposure limits (for example, OSHA PELs).
- Eye Protection:
 - Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended. Have eye-flushing equipment available.
- Skin Protection:
 - Avoid skin contact with this product. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.
- Respiratory Protection:
 - Keep dust exposure to a minimum with engineering and administrative controls. Use appropriate NIOSH/MSHA approved particulate respirators if necessary. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer.

Airborne Exposure Guidelines:

Recommended Exposure Limits 8-hr TWA	Activated Carbons
Total Dust	10 mg/m ³ *
Respirable Fraction	3 mg/m ³ *

*OSHA and ACGIH have not established specific exposure limits for this material. The recommended exposure limits for these activated carbon products are base on the Threshold Limit Values adopted by ACGIH for Particulates (insoluble) Not Otherwise Classified. The OSHA PEL for Nuisance Dust is 15 mg/m³ (5 mg/m³ respirable fraction).

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point, C:	• NA	Freezing Point, C:	• NA
Bulk Density - Powder Grades	• 12-30 lbs/ft ³	% Volatiles	• NA
Vapor Pressure	• NA	Solubility in Water	• Insoluble
Vapor Density	• NA	Appearance and Odor	• Black powder with no odor
Evaporation Rate	• NA		

NA - Not applicable

10. STABILITY AND REACTIVITY DATA

- Stability:
 - This product is stable under the specified conditions of storage, shipment and use. Avoid storing at high temperatures or in direct sunlight.
- Incompatibility:
 - Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion. Avoid contact with strong acids.
- Hazardous Decomposition Products:
 - Oxides of Carbon
- Hazardous Polymerization:
 - Does not occur.

11. TOXICOLOGICAL INFORMATION

This material is non-toxic. Used activated carbon may exhibit characteristics of the adsorbed material.

12. ECOLOGICAL INFORMATION

This material, in its original state, is not harmful to the environment. Used activated carbon may exhibit characteristics of the adsorbed material.

13. DISPOSAL CONSIDERATIONS

In its original state, this product is not a hazardous material or hazardous waste. Follow applicable governmental regulations for waste disposal.

Used activated carbon may become classified as a hazardous waste depending upon the application. Follow applicable regulations for disposal.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name:	• Carbon, Activated
Hazard Class:	• 4.2
UN Number:	• 1362
Packing Group:	• III
Freight Classification:	• STCC Code - #4916185 NMFC 040560

15. REGULATORY INFORMATION

FEDERAL REGULATIONS:

OSHA Hazard Communication Standard, 29CFR1910.1200:	• See "Particulates not otherwise regulated," in Table Z-1, of 29CFR1910.1000, "Limits For Air Contaminates".
CERCLA/SUPERFUND, 40CFR117, 302:	• Notification of spills of this material is not required.
SARA/SUPERFUND:	• Section 302 – Extremely hazardous substances (40CFR355): This product is not listed as an extremely hazardous substance.
	• Section 313 – List of toxic chemicals: This product is not listed.
Toxic Substances Control Act, 40CFR710:	• This product is on the inventory list.
Resource Conservation and Recovery Act:	• This product, in its original state, does not meet the criteria of hazardous waste.

STATE REGULATIONS:

California Occupational Safety and Health	• Not listed.
Massachusetts Substance List	• Not listed.
New Jersey Right-To-Know	• Not listed.
Pennsylvania Right-To-Know	• Not listed.

16. OTHER INFORMATION

Activated carbon can be safely stored in any normal storage area, but away from sources of direct heat. **Storage at elevated temperatures or in direct sunlight may contribute to spontaneous combustion of this product.** This product is a self-heating substance (UN Manual of Tests and Criterion, Second Revised Edition. Test N.3.) Storage at high ambient temperature may exacerbate the self-heating tendency.

WARNING: Activated carbon (especially when wet) can deplete oxygen from the air, and dangerously low levels of oxygen may result. When workers enter a vessel containing activated carbon, procedures for potentially low oxygen areas should be followed.

REVISION SUMMARY:

REV 07: Revision of Section 7.
REV 06: Added product, DARCO KB-80 and DARCO KB-100 to Section 1
REV 05: Added product, DARCO KB-M to Section 1.
REV 04: Added products, DARCO KB-G and DARCO KB-WJ to Section 1.
REV 03: Changed the company address.

The information herein is given in good faith but no warranty, expressed or implied, is made.



Oatey® Purple Primer and Oatey® Clear Primer

Oatey Co.

Version No: 1.1

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 10/19/2023

Print Date: 10/19/2023

S.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	Oatey® Purple Primer and Oatey® Clear Primer
Synonyms	Not Available
Proper shipping name	Flammable liquids, n.o.s. Acetone and Cyclohexanone
Other means of identification	Purple Primer: 30755, 30756, 30757, 30758, 30759, Clear Primer: 30750, 30751, 30752, 30753, 30754

Recommended use of the chemical and restrictions on use

Relevant identified uses	Joining PVC Pipes

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Oatey Co.
Address	20600 Emerald Parkway, Cleveland, OH 44135 United States Ohio 44135 United States
Telephone	216-267-7100
Fax	Not Available
Website	oatey.com
Email	info@oatey.com

Emergency phone number

Association / Organisation	Chemtrec
Emergency telephone numbers	1-800-424-9300 (Outside the US 1-703-527-3887)
Other emergency telephone numbers	1-877-740-5015 (Emergency First Aid)

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

Classification	Flammable Liquids Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Carcinogenicity Category 2

Label elements

Hazard pictogram(s)	
Signal word	Danger

Oatey® Purple Primer and Oatey® Clear Primer

Hazard statement(s)

	Highly flammable liquid and vapour.
	Causes serious eye irritation.
	May cause drowsiness or dizziness.
	Suspected of causing cancer.

Hazard(s) not otherwise classified

Repeated exposure may cause skin dryness or cracking. May form explosive peroxides.
Additional details on the carcinogenicity classification are provided in Section 11.

Precautionary statement(s) Prevention

	Obtain special instructions before use.
	Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
	Keep container tightly closed.
	Use only outdoors or in a well-ventilated area.
	Wear protective gloves, protective clothing, eye protection and face protection.
	Ground/bond container and receiving equipment.
	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
	Use only non-sparking tools.
	Take precautionary measures against static discharge.
	Avoid breathing mist/vapours/spray.
	Do not handle until all safety precautions have been read and understood.
	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

	IF exposed or concerned: Get medical advice/ attention.
	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
	If eye irritation persists: Get medical advice/attention.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s) Storage

	Store in a well-ventilated place. Keep cool.
	Store locked up.

Precautionary statement(s) Disposal

	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
67-64-1*	40-50	<u>Acetone</u>
108-94-1*	20-30	<u>cyclohexanone</u>
109-99-9*	10-20	<u>tetrahydrofuran</u>
78-93-3	10-20	<u>methyl ethyl ketone</u>

Oatey® Purple Primer and Oatey® Clear Primer

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary.
Ingestion	▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-fighting measures

Extinguishing media

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.
- ▶ Water spray or fog - Large fires only.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special protective equipment and precautions for fire-fighters

Fire Fighting	▶ Alert Fire Department and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves in the event of a fire. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ Consider evacuation (or protect in place). ▶ Fight fire from a safe distance, with adequate cover. ▶ If safe, switch off electrical equipment until vapour fire hazard removed. ▶ Use water delivered as a fine spray to control the fire and cool adjacent area. ▶ Avoid spraying water onto liquid pools. ▶ Do not approach containers suspected to be hot. ▶ Cool fire exposed containers with water spray from a protected location. ▶ If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	▶ Liquid and vapour are highly flammable. ▶ Severe fire hazard when exposed to heat, flame and/or oxidisers. ▶ Vapour may travel a considerable distance to source of ignition. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). May form explosive peroxides Combustion products include: carbon dioxide (CO₂) other pyrolysis products typical of burning organic material.

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	- Remove all ignition sources. - Clean up all spills immediately. - Avoid breathing vapours and contact with skin and eyes. - Control personal contact with the substance, by using protective equipment. - Contain and absorb small quantities with vermiculite or other absorbent material. - Wipe up. - Collect residues in a flammable waste container.
Major Spills	- Clear area of personnel and move upwind. - Alert Fire Department and tell them location and nature of hazard. - May be violently or explosively reactive. - Wear breathing apparatus plus protective gloves. - Prevent, by any means available, spillage from entering drains or water course. - Consider evacuation (or protect in place). - No smoking, naked lights or ignition sources. - Increase ventilation. - Stop leak if safe to do so. - Water spray or fog may be used to disperse /absorb vapour. - Contain spill with sand, earth or vermiculite. - Use only spark-free shovels and explosion proof equipment. - Collect recoverable product into labelled containers for recycling. - Absorb remaining product with sand, earth or vermiculite. - Collect solid residues and seal in labelled drums for disposal. - Wash area and prevent runoff into drains. - If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	- Containers, even those that have been emptied, may contain explosive vapours. - Do NOT cut, drill, grind, weld or perform similar operations on or near containers. - Avoid all personal contact, including inhalation. - Wear protective clothing when risk of exposure occurs. - Use in a well-ventilated area. - Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. - Avoid smoking, naked lights, heat or ignition sources. - When handling, DO NOT eat, drink or smoke. - Vapour may ignite on pumping or pouring due to static electricity. DO NOT use plastic buckets. - Earth and secure metal containers when dispensing or pouring product. - Use spark-free tools when handling. - Avoid contact with incompatible materials. - Keep containers securely sealed. - Avoid physical damage to containers. - Always wash hands with soap and water after handling. - Work clothes should be laundered separately. - Use good occupational work practice. - Observe manufacturer's storage and handling recommendations contained within this SDS. - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
Other information	- Store in original containers in approved flame-proof area. - No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depression, basement or areas where vapours may be trapped. - Keep containers securely sealed. - Store away from incompatible materials in a cool, dry well ventilated area.

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

- ▶ Protect containers against physical damage and check regularly for leaks.
- ▶ Observe manufacturer's storage and handling recommendations contained within this MSDS.
- ▶ Tank storage: Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded). Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.
- ▶ Keep in a cool place. Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapors in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable.
- ▶ For containers, or container linings use mild steel, stainless steel. Examples of suitable materials are: high density polyethylene (HDPE), polypropylene (PP), and Viton (FMK), which have been specifically tested for compatibility with this product.
- ▶ For container linings, use amine-adduct cured epoxy paint.
- ▶ For seals and gaskets use: graphite, PTFE, Viton A, Viton B.
- ▶ Unsuitable material: Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene. However, some may be suitable for glove materials.
- ▶ Do not cut, drill, grind, weld or perform similar operations on or near containers. Containers, even those that have been emptied, can contain explosive vapors.

Conditions for safe storage, including any incompatibilities

Suitable container	▶ Packing as supplied by manufacturer. ▶ Plastic containers may only be used if approved for flammable liquid. ▶ Check that containers are clearly labelled and free from leaks.
Storage incompatibility	Methyl ethyl ketone: ▶ reacts violently with strong oxidisers, aldehydes, nitric acid, perchloric acid, potassium tert-butoxide, oleum ▶ is incompatible with inorganic acids, aliphatic amines, ammonia, caustics, isocyanates, pyridines, chlorosulfonic acid ▶ forms unstable peroxides in storage, or on contact with propanol or hydrogen peroxide ▶ attacks some plastics ▶ may generate electrostatic charges, due to low conductivity, on flow or agitation ▶ Avoid strong bases. ▶ Avoid reaction with oxidising agents

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-1	Acetone	Acetone	1000 ppm / 2400 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	Acetone	Acetone	250 ppm / 590 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	cyclohexanone	Cyclohexanone	50 ppm / 200 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	cyclohexanone	Cyclohexanone	25 ppm / 100 mg/m3	Not Available	Not Available	[skin]
US OSHA Permissible Exposure Limits (PELs) Table Z-1	tetrahydrofuran	Tetrahydrofuran	200 ppm / 590 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	tetrahydrofuran	Tetrahydrofuran	200 ppm / 590 mg/m3	735 mg/m3 / 250 ppm	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	methyl ethyl ketone	2-Butanone (Methyl ethyl ketone)	200 ppm / 590 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	methyl ethyl ketone	2-Butanone	200 ppm / 590 mg/m3	885 mg/m3 / 300 ppm	Not Available	Not Available

Exposure controls

Oatey® Purple Primer and Oatey® Clear Primer

	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard 'physically' away from the worker and ventilation that strategically 'adds' and 'removes' air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace possess varying 'escape' velocities which, in turn, determine the 'capture velocities' of fresh circulating air required to effectively remove the contaminant. <table border="1"> <tr> <th>Type of Contaminant:</th><th>Air Speed:</th></tr> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air).</td><td>0.25-0.5 m/s (50-100 f/min.)</td></tr> <tr> <td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td><td>0.5-1 m/s (100-200 f/min.)</td></tr> <tr> <td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td><td>1-2.5 m/s (200-500 f/min.)</td></tr> </table> Within each range the appropriate value depends on: <table border="1"> <tr> <th>Lower end of the range</th><th>Upper end of the range</th></tr> <tr> <td>1: Room air currents minimal or favourable to capture</td><td>1: Disturbing room air currents</td></tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only.</td><td>2: Contaminants of high toxicity</td></tr> <tr> <td>3: Intermittent, low production.</td><td>3: High production, heavy use</td></tr> <tr> <td>4: Large hood or large air mass in motion</td><td>4: Small hood-local control only</td></tr> </table> Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used. · Adequate ventilation is typically taken to be that which limits the average concentration to no more than 25% of the LEL within the building, room or enclosure containing the dangerous substance. · Ventilation for plant and machinery is normally considered adequate if it limits the average concentration of any dangerous substance that might potentially be present to no more than 25% of the LEL. However, an increase up to a maximum 50% LEL can be acceptable where additional safeguards are provided to prevent the formation of a hazardous explosive atmosphere. For example, gas detectors linked to emergency shutdown of the process might be used together with maintaining or increasing the exhaust ventilation on solvent evaporating ovens and gas turbine enclosures. · Temporary exhaust ventilation systems may be provided for non-routine higher-risk activities, such as cleaning, repair or maintenance in tanks or other confined spaces or in an emergency after a release. The work procedures for such activities should be carefully considered.. The atmosphere should be continuously monitored to ensure that ventilation is adequate and the area remains safe. Where workers will enter the space, the ventilation should ensure that the concentration of the dangerous substance does not exceed 10% of the LEL (irrespective of the provision of suitable breathing apparatus)	Type of Contaminant:	Air Speed:	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)	Lower end of the range	Upper end of the range	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	3: Intermittent, low production.	3: High production, heavy use	4: Large hood or large air mass in motion	4: Small hood-local control only
Type of Contaminant:	Air Speed:																		
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min.)																		
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)																		
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Lower end of the range	Upper end of the range																		
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents																		
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3: Intermittent, low production.	3: High production, heavy use																		
4: Large hood or large air mass in motion	4: Small hood-local control only																		
Individual protection measures, such as personal protective equipment																			
Eye and face protection	▸ Safety glasses with side shields. ▸ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].																		
Skin protection	See Hand protection below																		

Oatey® Purple Primer and Oatey® Clear Primer

Hands/feet protection	▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	▶ Overalls. ▶ PVC Apron. ▶ PVC protective suit may be required if exposure severe. ▶ Eyewash unit. ▶ Ensure there is ready access to a safety shower. ▶ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. ▶ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). ▶ Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

Respiratory protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

SECTION 9 Physical and chemical properties**Information on basic physical and chemical properties**

Appearance	Purple or clear transparent liquid		
Physical state	Liquid	Relative density (Water = 1)	0.84 +/- 0.02 @ 20°C
Odour	Solvent	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cps)	<100
Initial boiling point and boiling range (°C)	66	Molecular weight (g/mol)	Not Available
Flash point (°C)	-10 - -5	Taste	Not Available
Evaporation rate	5.5-8.0	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure	145 mmHG @ 20°C	Gas group	Not Available
Solubility in water	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	2.5	VOC g/L	<550

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur.

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract. Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
Ingestion	The material has NOT been classified as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	Skin contact is not thought to have harmful health effects; the material may still produce health damage following entry through wounds, lesions or abrasions. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Repeated exposure may cause skin dryness or cracking. Suspected of causing cancer. In 2012 USEPA Integrated Risk Information System (IRIS) reviewed a two species inhalation lifetime study on THF conducted by NTP (1998). Male rats developed renal tumors and female mice developed liver tumors while neither the female rats nor the male mice showed similar results. Because the carcinogenic mechanisms could not be identified clearly in either species for either tumor, the EPA determined that the male rat and female mouse findings are relevant to the assessment of carcinogenic potential in humans. Therefore, the IRIS review concludes that these data in aggregate indicate that there is 'suggestive evidence of carcinogenic potential' following exposure to THF by all routes of exposure.

Carcinogenicity	Chemical Name	IARC	NTP	OSHA
	Acetone	Not listed	Not listed	Not listed
	Cyclohexanone	Group 3 -Not classifiable as to its carcinogenicity to humans	Not listed	Not listed
	Tetrahydrofuran	Group 2B - Possibly carcinogenic to humans	Not listed	Not listed
	Methyl ethyl ketone	Not listed	Not listed	Not listed

Acute Toxicity	✗	Carcinogenicity	✓
Skin Irritation/Corrosion	✗	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Oatey® Purple Primer and Oatey® Clear Primer	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

Acetone	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	3744.6-5000.7mg/L	4
	NOEC(ECx)	12h	Fish	0.001mg/L	4
	EC50	72h	Algae or other aquatic plants	5600-10000mg/l	4
	EC50	48h	Crustacea	6098.4mg/L	5
	EC50	96h	Algae or other aquatic plants	9.873-27.684mg/l	4
cyclohexanone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	17.7-85.6mg/l	4
	EC50	48h	Crustacea	>100mg/l	2
	LC50	96h	Fish	481-578mg/l	4
	EC10(ECx)	72h	Algae or other aquatic plants	0.4-7.93mg/l	4
tetrahydrofuran	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	1970-2360mg/l	4
	NOEC(ECx)	24h	Fish	>=5mg/l	1
methyl ethyl ketone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	1220mg/l	2
	EC50	48h	Crustacea	308mg/l	2
	EC50	96h	Algae or other aquatic plants	>500mg/l	4
	NOEC(ECx)	48h	Crustacea	68mg/l	2
	LC50	96h	Fish	>324mg/L	4
Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data					

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
cyclohexanone	LOW	LOW
tetrahydrofuran	LOW	LOW
methyl ethyl ketone	LOW (Half-life = 14 days)	LOW (Half-life = 26.75 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
Acetone	LOW (BCF = 0.69)
cyclohexanone	LOW (BCF = 2.45)
tetrahydrofuran	LOW (LogKOW = 0.46)
methyl ethyl ketone	LOW (LogKOW = 0.29)

Mobility in soil

Ingredient	Mobility
Acetone	HIGH (KOC = 1.981)
cyclohexanone	LOW (KOC = 15.15)
tetrahydrofuran	LOW (KOC = 4.881)
methyl ethyl ketone	MEDIUM (KOC = 3.827)

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	- Containers may still present a chemical hazard/ danger when empty. - Return to supplier for reuse/ recycling if possible. Otherwise: - If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. - Where possible retain label warnings and SDS and observe all notices pertaining to the product. DO NOT allow wash water from cleaning or process equipment to enter drains. - It may be necessary to collect all wash water for treatment before disposal. - In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. - Where in doubt contact the responsible authority. - Recycle wherever possible. - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. - Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material). - Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 Transport information

Labels Required

	
Marine Pollutant	NO

Shipping container and transport vehicle placarding and labeling may vary from the below information. Products that are regulated for transport will be packaged and marked as Dangerous Goods in Limited Quantities according to US DOT, IATA and IMDG regulations. In case of reshipment, it is the responsibility of the shipper to determine the appropriate labels and markings in accordance with applicable transport regulations.

Land transport (DOT)

14.1. UN number or ID number	1993				
14.2. UN proper shipping name	Flammable liquids, n.o.s. Acetone and Cyclohexanone				
14.3. Transport hazard class(es)	<table border="1"> <tr> <td>Class</td><td>3</td></tr> <tr> <td>Subsidiary Hazard</td><td>Not Applicable</td></tr> </table>	Class	3	Subsidiary Hazard	Not Applicable
Class	3				
Subsidiary Hazard	Not Applicable				
14.4. Packing group	II				
14.5. Environmental hazard	Not Applicable				
14.6. Special precautions for user	<table border="1"> <tr> <td>Hazard Label</td><td>3</td></tr> <tr> <td>Special provisions</td><td>IB2, T7, TP1, TP8, TP28</td></tr> </table>	Hazard Label	3	Special provisions	IB2, T7, TP1, TP8, TP28
Hazard Label	3				
Special provisions	IB2, T7, TP1, TP8, TP28				

Air transport (ICAO-IATA / DGR)

14.1. UN number	1993						
14.2. UN proper shipping name	Flammable liquid, n.o.s. * Acetone and Cyclohexanone						
14.3. Transport hazard class(es)	<table border="1"> <tr> <td>ICAO/IATA Class</td><td>3</td></tr> <tr> <td>ICAO / IATA Subsidiary Hazard</td><td>Not Applicable</td></tr> <tr> <td>ERG Code</td><td>3H</td></tr> </table>	ICAO/IATA Class	3	ICAO / IATA Subsidiary Hazard	Not Applicable	ERG Code	3H
ICAO/IATA Class	3						
ICAO / IATA Subsidiary Hazard	Not Applicable						
ERG Code	3H						
14.4. Packing group	II						
14.5. Environmental hazard	Not Applicable						

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

14.6. Special precautions for user	Special provisions	A3
	Cargo Only Packing Instructions	364
	Cargo Only Maximum Qty / Pack	60 L
	Passenger and Cargo Packing Instructions	353
	Passenger and Cargo Maximum Qty / Pack	5 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y341
	Passenger and Cargo Limited Maximum Qty / Pack	1 L

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1993	
14.2. UN proper shipping name	FLAMMABLE LIQUID, N.O.S. Acetone and Cyclohexanone	
14.3. Transport hazard class(es)	IMDG Class	3
	IMDG Subsidiary Hazard	Not Applicable
14.4. Packing group	II	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	F-E, S-E
	Special provisions	274
	Limited Quantities	1 L

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

Acetone is found on the following regulatory lists

US - Massachusetts - Right To Know Listed Chemicals
 US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals
 US EPA Integrated Risk Information System (IRIS)

US NIOSH Recommended Exposure Limits (RELs)
 US OSHA Permissible Exposure Limits (PELs) Table Z-1
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Section 4/12 (b) - Sunset Dates/Status

cyclohexanone is found on the following regulatory lists

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
 US - Massachusetts - Right To Know Listed Chemicals
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US EPA Integrated Risk Information System (IRIS)

US NIOSH Recommended Exposure Limits (RELs)
 US OSHA Permissible Exposure Limits (PELs) Table Z-1
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

tetrahydrofuran is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans
 US - California Proposition 65 - Carcinogens
 US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List
 US - Massachusetts - Right To Know Listed Chemicals

US DOE Temporary Emergency Exposure Limits (TEELs)
 US EPA Integrated Risk Information System (IRIS)
 US NIOSH Recommended Exposure Limits (RELs)
 US OSHA Permissible Exposure Limits (PELs) Table Z-1
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
 US TSCA Section 4/12 (b) - Sunset Dates/Status

methyl ethyl ketone is found on the following regulatory lists

Oatey® Purple Primer and Oatey® Clear Primer

US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants
 US - Massachusetts - Right To Know Listed Chemicals
 US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
 US DOE Temporary Emergency Exposure Limits (TEELs)
 US Drug Enforcement Administration (DEA) List I and II Regulated Chemicals

US EPA Integrated Risk Information System (IRIS)
 US NIOSH Recommended Exposure Limits (RELs)
 US OSHA Permissible Exposure Limits (PELs) Table Z-1
 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	Yes
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	Yes
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	Yes

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
Acetone	5000	2270
cyclohexanone	5000	2270
tetrahydrofuran	1000	454
methyl ethyl ketone	5000	2270
methyl ethyl ketone	5000	2270

State Regulations

US. California Proposition 65

 **WARNING:** This product can expose you to chemicals including **tetrahydrofuran**, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

National Inventory Status

National Inventory	Status
USA - TSCA	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

Continued...

Oatey® Purple Primer and Oatey® Clear Primer

SECTION 16 Other information

Initial Date	09/28/2023

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit
IDLH: Immediately Dangerous to Life or Health Concentrations
ES: Exposure Standard
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index
DNEL: Derived No-Effect Level
PNEC: Predicted no-effect concentration
AII: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances



SAFETY DATA SHEET

1. Identification

Product identifier

Oatey PVC Heavy Duty Clear or Gray Cement

Other means of identification

SDS number

1102EV

Synonyms

Part Numbers: 30850,30850V, 30863 30863V, 30876, 30876V, 30882, 31008, 31008V, 31011, 31011R, 31011V, 31950, 31951, 31952, 31953, 31953R, 30349, 31093, 31093V, 31094, 31094V, 31095,31095V, 31105, 31105V, 31118, 31118V, 31978, 31979, 31980, 31981, 32050, 32051, 32052, 32210, 32211

Recommended use

Joining PVC Pipes

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name

Oatey Co.

Address

4700 West 160th St.
Cleveland, OH 44135

Telephone

216-267-7100

E-mail

info@oatey.com

Transport Emergency

Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)

Emergency First Aid

1-877-740-5015

Contact person

MSDS Coordinator

2. Hazard(s) identification

Physical hazards

Flammable liquids

Category 2

Health hazards

Acute toxicity, oral

Category 4

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Specific target organ toxicity, single exposure

Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure

Category 3 narcotic effects

Aspiration hazard

Category 1

OSHA defined hazards

Not classified.

Label elements



Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response

Rinse mouth. Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May form explosive peroxides. Contains a chemical classified by the US EPA as a suspected possible carcinogen.

Supplemental information

Not applicable.

3. Composition/information on ingredients**Mixtures**

Chemical name	CAS number	%
Furan, Tetrahydro-	109-99-9	30-60
2-Propanone	67-64-1	10-30
Cyclohexanone	108-94-1	10-30
Polyvinyl chloride	9002-86-2	10-30
Methyl ethyl ketone	78-93-3	5-10
Colloidal silicon dioxide	112945-52-5	1-5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling

Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Colloidal silicon dioxide (CAS 112945-52-5)	TWA	0.8 mg/m3	Unspecified.
		20 mppcf	Unspecified.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Polyvinyl chloride (CAS 9002-86-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
2-Propanone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
Cyclohexanone (CAS 108-94-1)	PEL	200 mg/m3	
		50 ppm	
Furan, Tetrahydro- (CAS 109-99-9)	PEL	590 mg/m3	
		200 ppm	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Methyl ethyl ketone (CAS 78-93-3)	PEL	590 mg/m3	
Polyvinyl chloride (CAS 9002-86-2)	PEL	200 ppm 5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Colloidal silicon dioxide (CAS 112945-52-5)	TWA	0.8 mg/m3 20 mppcf

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-Propanone (CAS 67-64-1)	STEL TWA	750 ppm 500 ppm	
Cyclohexanone (CAS 108-94-1)	STEL TWA	50 ppm 20 ppm	
Furan, Tetrahydro- (CAS 109-99-9)	STEL TWA	100 ppm 50 ppm	
Methyl ethyl ketone (CAS 78-93-3)	STEL TWA	300 ppm 200 ppm	
Polyvinyl chloride (CAS 9002-86-2)	TWA	1 mg/m3	Respirable fraction.

U.S. - NIOSH

Components	Type	Value	Form
Colloidal silicon dioxide (CAS 112945-52-5)	REL	6 mg/m3	Unspecified.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-Propanone (CAS 67-64-1)	TWA	590 mg/m3 250 ppm 6 mg/m3
Colloidal silicon dioxide (CAS 112945-52-5)	TWA	100 mg/m3 25 ppm
Cyclohexanone (CAS 108-94-1)	TWA	735 mg/m3 250 ppm
Furan, Tetrahydro- (CAS 109-99-9)	STEL TWA	590 mg/m3 200 ppm 885 mg/m3
Methyl ethyl ketone (CAS 78-93-3)	STEL TWA	300 ppm 590 mg/m3 200 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-Propanone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
Cyclohexanone (CAS 108-94-1)	80 mg/l	1,2-Cyclohexanediol, with hydrolysis	Urine	*
	8 mg/l	Cyclohexanol, with hydrolysis	Urine	*
Furan, Tetrahydro- (CAS 109-99-9)	2 mg/l	Tetrahydrofuran	Urine	*
Methyl ethyl ketone (CAS 78-93-3)	2 mg/l	MEK	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Cyclohexanone (CAS 108-94-1)

Skin designation applies.

US - Tennessee OELs: Skin designation

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

Furan, Tetrahydro- (CAS 109-99-9)

Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Wash hands after handling and before eating.

9. Physical and chemical properties

Appearance

Opaque.or Translucent.

Physical state

Liquid.

Form

Liquid.

Color

Gray or Clear.

Odor

Solvent.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

151 °F (66.11 °C)

Flash point

14.0 - 23.0 °F (-10.0 - -5.0 °C)

Evaporation rate

5.5 - 8

Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	145 mm Hg @ 20 C
Vapor density	2.5
Relative density	0.88 - 0.92
Solubility(ies)	
Solubility (water)	Negligible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	1200 - 2500 cP
Other information	
Bulk density	7.5 lb/gal
VOC (Weight %)	See Can Label

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Ammonia. Amines. Isocyanates. Caustics.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May be fatal if swallowed and enters airways. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May be fatal if swallowed and enters airways. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways. Narcotic effects. May cause respiratory irritation.

Components	Species	Test Results
Cyclohexanone (CAS 108-94-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	948 mg/kg
<i>Inhalation</i>		
LC50	Rat	8000 ppm, 4 hours

Components	Species	Test Results
Oral LD50	Rat	1540 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Suspected of causing cancer. In 2012 USEPA Integrated Risk Information System (IRIS) reviewed a two species inhalation lifetime study on THF conducted by NTP (1998). Male rats developed renal tumors and female mice developed liver tumors while neither the female rats nor the male mice showed similar results. Because the carcinogenic mechanisms could not be identified clearly in either species for either tumor, the EPA determined that the male rat and female mouse findings are relevant to the assessment of carcinogenic potential in humans. Therefore, the IRIS review concludes that these data in aggregate indicate that there is "suggestive evidence of carcinogenic potential" following exposure to THF by all routes of exposure. This product contains polyvinyl chloride (PVC) that is not a fabricated product, and is therefore, defined and regulated as a toxic and hazardous substance under 29 C.F.R. § 1910.1017 due to the presumed presence of residual vinyl chloride monomer. The concentrations of residual vinyl chloride calculated to be contained in this product are well below the threshold for classification in accordance with 29 C.F.R. § 1910.1200.

IARC Monographs. Overall Evaluation of Carcinogenicity

Colloidal silicon dioxide (CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.
Cyclohexanone (CAS 108-94-1)	3 Not classifiable as to carcinogenicity to humans.
Polyvinyl chloride (CAS 9002-86-2)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Polyvinyl chloride (CAS 9002-86-2)	Cancer

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Respiratory tract irritation. Narcotic effects.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Cyclohexanone (CAS 108-94-1)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 481 - 578 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Partition coefficient n-octanol / water (log Kow)	
2-Propanone (CAS 67-64-1)	-0.24
Cyclohexanone (CAS 108-94-1)	0.81
Furan, Tetrahydro- (CAS 109-99-9)	0.46
Methyl ethyl ketone (CAS 78-93-3)	0.29

Mobility in soil	No data available.

Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	T11, TP1, TP8, TP27
Packaging exceptions	150
Packaging non bulk	201
Packaging bulk	243

IATA

UN number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1133
UN proper shipping name	ADHESIVES
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Polyvinyl chloride (CAS 9002-86-2)

Cancer
Central nervous system
Liver
Blood
Flammability

CERCLA Hazardous Substance List (40 CFR 302.4)

2-Propanone (CAS 67-64-1)

LISTED

Cyclohexanone (CAS 108-94-1)

LISTED

Furan, Tetrahydro- (CAS 109-99-9)

LISTED

Methyl ethyl ketone (CAS 78-93-3)

LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

2-Propanone (CAS 67-64-1)

6532

Methyl ethyl ketone (CAS 78-93-3)

6714

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

2-Propanone (CAS 67-64-1)

35 %WV

Methyl ethyl ketone (CAS 78-93-3)

35 %WV

DEA Exempt Chemical Mixtures Code Number

2-Propanone (CAS 67-64-1)

6532

Methyl ethyl ketone (CAS 78-93-3)

6714

US state regulations

US. Massachusetts RTK - Substance List

2-Propanone (CAS 67-64-1)

Colloidal silicon dioxide (CAS 112945-52-5)

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Methyl ethyl ketone (CAS 78-93-3)

US. New Jersey Worker and Community Right-to-Know Act

2-Propanone (CAS 67-64-1)

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Methyl ethyl ketone (CAS 78-93-3)

Polyvinyl chloride (CAS 9002-86-2)

US. Pennsylvania Worker and Community Right-to-Know Law

2-Propanone (CAS 67-64-1)

Colloidal silicon dioxide (CAS 112945-52-5)

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Methyl ethyl ketone (CAS 78-93-3)

US. Rhode Island RTK

2-Propanone (CAS 67-64-1)

Cyclohexanone (CAS 108-94-1)

Furan, Tetrahydro- (CAS 109-99-9)

Methyl ethyl ketone (CAS 78-93-3)

US. California Proposition 65

 **WARNING:** This product can expose you to chemicals including Tetrahydrofuran, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

See Section 11 for additional information.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	04-August-2014
Revision date	07-01-2022
Version #	03
HMIS® ratings	Health: 2 Flammability: 3 Physical hazard: 0
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.

ASHLAND®		Page: 1
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : PARTS Master® 80W90
GEAR OIL

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitization : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary Statements : If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Prevention:

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

ASHLAND®		Page: 2
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

Wash skin thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection/ face protection.

Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	Not a hazardous substance or mixture.	21.10
MINERAL OIL		Not a hazardous substance or mixture.	1.39
ALKYL PHOSPHATE		Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	1.02
LONG-CHAIN ALKYL AMINE		Acute Tox. 4; H302 Acute Tox. 2; H330 Acute Tox. 3; H311	0.34

ASHLAND®		Page: 3
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

		Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	

SECTION 4. FIRST AID MEASURES

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: If breathed in, move person into fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. Wash contaminated clothing before re-use.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways) Dizziness Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Notes to physician	: No hazards which require special first aid measures.

ASHLAND®		Page: 4
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons
Oxides of phosphorus
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

ASHLAND®		Page: 5
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

- Advice on safe handling : Do not breathe vapours/dust.
Do not smoke.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Container hazardous when empty.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	PEL	500 ppm 2,000 mg/m3	OSHA_TRANS
		REL	5 mg/m3 Mist.	NIOSH/GUIDE
		STEL	10 mg/m3 Mist.	NIOSH/GUIDE
		PEL	5 mg/m3 Mist.	OSHA_TRANS
MINERAL OIL		REL	5 mg/m3 Mist.	NIOSH/GUIDE
		STEL	10 mg/m3 Mist.	NIOSH/GUIDE
		PEL	5 mg/m3 Mist.	OSHA_TRANS
		TWA	5 mg/m3 Mist.	TN OEL
		TWA	5 mg/m3 Inhalable fraction.	ACGIH

- Engineering measures : Provide sufficient mechanical (general and/or local exhaust)

ASHLAND®		Page: 6
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:
impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : > 424.9 °F / 218.3 °C
(1013.333 hPa)

Flash point : > 432 °F / > 222 °C
Method: Cleveland open cup

Evaporation rate : > 1
Ethyl Ether

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

ASHLAND®		Page: 8
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

Ingestion

Acute toxicity

Not classified based on available information.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.58 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Assessment: Not classified as acutely toxic by inhalation under GHS.
 Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg
 Remarks: No mortality observed at this dose.

LD 50 (Rabbit): > 2,000 mg/kg
 Assessment: Not classified as acutely toxic by dermal absorption under GHS.

LONG-CHAIN ALKYL AMINE:

Acute oral toxicity :
 Assessment: The component/mixture is classified as acute oral toxicity, category 4.

Acute inhalation toxicity : Assessment: The component/mixture is classified as acute inhalation toxicity, category 2.

Acute dermal toxicity : Assessment: The component/mixture is classified as acute dermal toxicity, category 3.

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Species: Rabbit

Result: Not irritating to skin

MINERAL OIL:

Result: Mildly irritating to skin

ALKYL PHOSPHATE:

Result: Corrosive to skin

LONG-CHAIN ALKYL AMINE:

Result: Corrosive after 3 minutes to 1 hour of exposure

ASHLAND®		Page: 9
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Species: Rabbit

Result: Not irritating to eyes

MINERAL OIL:

Result: Mildly irritating to eyes

ALKYL PHOSPHATE:

Result: Corrosive to eyes

LONG-CHAIN ALKYL AMINE:

Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Test Type: Buehler Test

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

LONG-CHAIN ALKYL AMINE:

Assessment: May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

ALKYL PHOSPHATE:

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

ASHLAND®		Page: 10
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
 Exposure time: 96 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 203
 Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR (Oncorhynchus mykiss (rainbow trout)): Calculated >= 1,000 mg/l
 Exposure time: 14 d

Toxicity to daphnia and other : NOEL (Daphnia (water flea)): 10 mg/l

ASHLAND®		Page: 11
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

aquatic invertebrates
(Chronic toxicity)

Exposure time: 21 d
Test substance: WAF
Method: OECD Test Guideline 211

LONG-CHAIN ALKYL AMINE:

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 2 - 4 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Bioaccumulative potential

Components:

No data available

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste

ASHLAND®		Page: 12
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

ASHLAND®		Page: 13
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant	no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Acute Health Hazard

SARA 313 Component(s) : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	70.00 - 90.00 %
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	20.00 - 30.00 %
LUBRICANT ADDITIVE	Not Assigned	5.00 - 10.00 %

New Jersey Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	70.00 - 90.00 %
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	20.00 - 30.00 %
LUBRICANT ADDITIVE	Not Assigned	5.00 - 10.00 %
MINERAL OIL	Not Assigned	1.00 - 5.00 %
ALKYL PHOSPHATE	Not Assigned	1.00 - 5.00 %
DISTILLATES (PETROLEUM), SOLVENT- DEWAXED HEAVY PARAFFINIC	64742-65-0	0.10 - 1.00 %

California Prop 65 : Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AUSTR	: On the inventory, or in compliance with the inventory

ASHLAND®		Page: 14
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

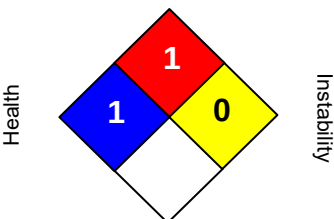
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 06/02/2015

NFPA:	HMIS III:						
Flammability Health Instability Special hazard. 	<table border="1"> <tr> <td>HEALTH</td><td>1</td></tr> <tr> <td>FLAMMABILITY</td><td>1</td></tr> <tr> <td>PHYSICAL HAZARD</td><td>0</td></tr> </table> 0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic	HEALTH	1	FLAMMABILITY	1	PHYSICAL HAZARD	0
HEALTH	1						
FLAMMABILITY	1						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Further information

ASHLAND®		Page: 15
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

ASHLAND®		Page: 16
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/11/2015
		SDS Number: R0091437
PARTS Master® 80W90 GEAR OIL		Version: 1.2
PM5831		

OSHA : Occupational Safety and Health Administration
 PMRA : Health Canada Pest Management Regulatory Agency
 RTK : Right to Know
 WHMIS : Workplace Hazardous Materials Information System



SAFETY DATA SHEET

Issue Date 18-Feb-2014

Revision Date: 10-Feb-2022

Version 5

1. IDENTIFICATION

GHS Product Identifier

Product Name

Phoenix 27-XL Water Dispersible Pipe Joint Lubricant

Other Means of Identification

SDS #

Chemical Formula

11-4 or 11-4R1

Other Information

Recommended Use of the Chemical and Restrictions on Use

Recommended Use

Lubricant

Details of the Supplier of the Safety Data Sheet

Supplier Address

JTM Products, Inc.
31025 Carter Street
Solon, OH 44139
Tel. 440-287-2302
800-229-6744
Fax. 440-287-3095

Emergency Telephone Number

Emergency Telephone

Chemtel 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

GHS classification

Hazard categories:

Skin Irritant 3

Eye irritation: Eye Irritant 2B

Label elements

Signal word: Warning

Hazard statements

H316 Causes mild skin irritation.
H320 Causes eye irritation.

Precautionary statements

P264 Wash skin thoroughly after handling.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Components

CAS No.	Chemical Name	Quantity
TSRN 0210	Proprietary Lubricity Enhancers	40 -50%
7732-18-5	Water	20-40%
68606-06-4 EINECS 271-723-9	Mixed sodium and potassium salts of tall oil (soap)	13-25%

Where range is displayed, the exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First Aid Measures**

Inhalation Move to fresh air. If symptoms persist, call a physician

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Drink plenty of water. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately

Skin Contact Wash off immediately with soap and water. If skin irritation persists, call a physician.

Most Important Symptoms and Effects, Both Acute and Delayed**Symptoms**

Direct contact with eyes may cause temporary irritation. Prolonged or repeated skin contact may cause irritation.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water. Water spray (fog). Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures****Personal Precautions**

Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Use personal protective equipment. Keep people away from and upwind of spill/leak.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information

Methods and Material for Containment and Cleaning Up**Methods for Containment**

Dike to collect large liquid spills. Prevent leakage or spillage if safe to do so.

Methods for Cleaning Up

Dam up. Soak up with inert absorbent material. Place the bulk of any spilled material into properly labeled containers. Rinse any remaining material to sewage treatment facility. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE**Precautions for Safe Handling****Handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not take internally.

Conditions for Safe Storage, Including any Incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible Materials Strong oxidizing agents. Strong bases

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control Parameters****Appropriate Engineering Controls**

Engineering Controls Eyewash stations Showers Ventilation systems.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear approved safety goggles.

Skin and Body Protection Lightweight protective clothing. Chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact.

Respiratory Protection No special protective equipment required. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

General Hygiene Considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

Control Parameters N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Paste		
Appearance	Off-White Paste	Odor	Bland
Color	Off-white	Odor threshold	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks – Method</u>
pH	≈9	5% solution
Melting point/freezing point	< 0° C/ < 32° F	
Boiling point/boiling range	> 104° C/ > 220° F	
Flash point	> 104° C/ > 220° F	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Not determined	

Flammability Limits in Air

Upper Flammability Limits	Not applicable
Lower Flammability Limits	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Specific Gravity	1.1-1.2
Water Solubility	Completely soluble
Solubility in other Solvents	Not determined
Partition Coefficient	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	None
Oxidizing Properties	None

Other Information

VOC Content (%) <5%

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing

Conditions to Avoid

Contact with incompatible material

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION**Information on Likely Route of Exposure****Product Information**

Inhalation	Not a likely route of exposure
Eye Contact	Causes eye irritation
Skin Contact	May cause mild skin irritation
Ingestion	Do not taste or swallow
Symptoms	Direct contact with eyes may cause temporary irritation. Prolonged or repeated contact may dry skin and cause irritation

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

Numerical Measures of Toxicity – Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 22665 mg/kg; Acute toxicity estimate mg/kg mg/L

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Persistence and Degradability

No information available.

Mobility

Not Determined.

Other Adverse Effects

Not Determined.

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

Contaminated Packaging

Do not re-use empty containers. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA All ingredients appear on inventory

DSL/NDSL All components of this product are listed or are exempt

EINECS/ELINCS - *European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
/ not available (N.A.)

ENCS - *Japan Existing and New Chemical Substances/not available (N.A.)*

IECSC - *China Inventory of Existing Chemical Substances/not available (N.A.)*

KECL - *Korean Existing and Evaluated Chemical Substances/not available (N.A.)*

PICCS - *Philippines Inventory of Chemicals and Chemical Substances/not available (N.A.)*

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42): None known

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302): None Known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: Not applicable

U.S. EPA Label Information

EPA Pesticide Registration Number: Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	0	0	Not determined
Issuance Date	18-Feb-2014			
Revision Date	10-Feb-2022			
Revision Note	Section 15: Corrected SARA information.			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS508
PRODUCT NAME: Prestone ® 50/50 Prediluted Engine Coolant/Antifreeze
Prestone ® 50/50 Ready-to-Use Antifreeze/Coolant
PRODUCT NUMBER: AF2050M, AF2050ML, AF2050M19, AF2050M200, AF2100, AF2100LCZ, AF2100LD, AF2100LHR, AF2100LRU, AF2100LT/F, AF2100PL, AF2100RU, AF2100S/F, AF2100S/FC, AF2100UK, AF2100/GF, AF2100/GFC, AF2100/X, AF2100-1KL/GF, AF2100-Retro/F, AF2155/GF, AF2725, AF2725/GF, AF12050M, PDSPLY36-AFAS, PDSPLY36-AFASB, PDSPLY36-AFBW, PDSPLY36-AFC, PRES01R, PRES04R, WSS-M97B57-A2, 65077, 71175, 71175/GF, 71175/GFC, 71175/GFC3, 71183, 71217, AF2300/F, AF2400/F, 78213/FC3, 78213/FC, 78213/F, 78205/F, 78205/FC, 78205/FC3, AF2100SAM/F, CAN71175-72/F

FORMULA NUMBER: YA-956BY-P50, YA-956BY-P50-B, YA-956BY-P50M, YA-956BY-P50M-B, YA-992-P50, YA-992-SC-2-P50

MANUFACTURER:
Prestone Products
Corporation
69 Eagle Rd.
Danbury, CT 06810

CANADIAN OFFICE:
Prestone Canada
33 MacIntosh Blvd.
Concord, ON L4K 4L5

MEXICO OFFICE:
ASG Operations Mexico S. de R.L. de C.V.
Carretera Mexico Cuautitlan, Kilometro 31.5, Nave
Industrial 5,
Loma Bonita, Cuautitlan, Mexico, 54800

MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:

(888)269-0750 (in the US and Canada)

01-800-715-4135 (in Mexico)

TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):

CHEMTREC 1-800-424-9300 (in the US and Canada) +1 703 741-5970 (outside the US and Canada)

PRODUCT USE: Automobile antifreeze – consumer product

RESTRICTIONS ON USE: None identified

2. Hazards Identification

GHS/HAZCOM 2012 Classification:

Health	Physical
Acute Toxicity Category 4 (oral) Specific Target Organ Toxicity – Repeated Exposure Category 2 Toxic to Reproduction Category 2	Not Hazardous

Label Elements



WARNING!

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H373 May cause damage to kidneys through prolonged or repeated exposure.

**Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe mist or vapors.

P264 Wash exposed skin thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P280 Wear protective gloves.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.

P330 Rinse mouth.

P308 + P313 IF exposed or concerned: Get medical advice.

Disposal:

P405 Store locked up.

P501 Dispose of contents and container in accordance with local and national regulations.

3. Composition/Information on Ingredients

Component	CAS No.	Amount
Ethylene Glycol	107-21-1	30-60
Water	7732-18-5	30-60
Diethylene Glycol	111-46-6	0-5
2-Ethyl Hexanoic Acid, Sodium Salt	19766-89-3	0-5

The exact concentrations are a trade secret.

4. First Aid Measures

INHALATION: Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get medical attention.

SKIN CONTACT: Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation persists, get medical attention.

EYE CONTACT: Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

INGESTION: Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

MOST IMPORTANT SYMPTOMS: May cause eye irritation. Inhalation of mists may cause nose and throat irritation and nervous system effects. Ingestion may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: Seek immediate medical attention for large ingestions.

NOTES TO PHYSICIAN: The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. The combination of metabolic acidosis, an osmol gap and oxalate crystals in the urine is evidence of ethylene glycol poisoning. Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. Respiratory support with mechanical ventilation may be required. There may be cranial nerve involvement in the late



stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth, and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphagia.

Ethanol is antidotal and its early administration may block the formation of nephrotoxic metabolites of ethylene glycol in the liver. The objective is to rapidly achieve and maintain a blood ethanol level of approximately 100 mg/dl by giving a loading dose of ethanol followed by a maintenance dose. Intravenous administration of ethanol is the preferred route. Ethanol blood levels should be checked frequently. Hemodialysis may be required. 4-Methyl pyrazole (Fomepizole®), a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of ethylene glycol poisoning. Fomepizole® is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Additional therapeutic modalities which may decrease the adverse consequences of ethylene glycol metabolism are the administration of both thiamine and pyridoxine. As there are complicated and serious overdoses, we recommend you consult with the toxicologists at your poison control center.

5. Firefighting Measures

SUITABLE EXTINGUISHING MEDIA: Use any media appropriate for the surrounding fire.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: A solid stream of water or foam directed into hot, burning liquid can cause frothing. Burning may produce carbon monoxide and carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Do not spray pool fires directly. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

6: Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Wear appropriate protective clothing and equipment (See Section 8).

METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP: Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING:

Harmful or Fatal if Swallowed. Do not drink antifreeze or solution. Avoid eye and prolonged or repeated skin contact. Avoid breathing vapors or mists. Wash exposed skin thoroughly with soap and water after use. Keep container away from open flames and excessive heat. Do not reuse empty containers unless properly cleaned. Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "autoignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Do not store in opened or unlabeled containers. Store away from excessive heat and oxidizers.

NFPA CLASSIFICATION: IIIB (May qualify for the following consumer quantity exemption: Consumer products that contain not more than 50 percent by volume of water-miscible flammable or combustible liquids, with the remainder of the product consisting of components that do not burn and where packaged in individual containers that do not exceed 1.3 gal (5 L) capacity.)



8. Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

CHEMICAL	EXPOSURE LIMIT
Ethylene Glycol	25 ppm TWA, 50 ppm STEL ACGIH TLV (as vapor) 10 mg/m ³ TWA ACGIH TLV (as inhalable fraction of the aerosol)
Water	None Established
Diethylene Glycol	10 mg/m ³ TWA AIHA WEEL
2-Ethyl Hexanoic Acid	None Established

APPROPRIATE ENGINEERING CONTROLS: Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: For operations where the occupational exposure limit is exceeded a NIOSH approved respirator with organic vapor cartridges and dust/mist prefilters or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

GLOVES: Chemical resistant gloves such as neoprene or PVC where contact is possible.

EYE PROTECTION: Splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

9. Physical and Chemical Properties

APPEARANCE:	Yellow liquid	ODOR:	Characteristic odor
ODOR THRESHOLD:	None	pH:	8.4 - 9.0
MELTING/FREEZING POINT:	-34°F (-36°C)	BOILING POINT/RANGE:	226-229°F (108-109°C)
FLASH POINT:	No flash @ >216°F (>102.2°C) SCC	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: Not determined UEL: Not determined
VAPOR PRESSURE:	< 0.1 mmHg @ 68°F	VAPOR DENSITY:	Not determined
RELATIVE DENSITY:	1.07	SOLUBILITIES	Water: Complete
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined

10. Stability and Reactivity

REACTIVITY: Normally unreactive



CHEMICAL STABILITY: Stable

POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with strong oxidizers will generate heat.

CONDITIONS TO AVOID: None known

INCOMPATIBLE MATERIALS: Normally unreactive, however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: May cause irritation of the nose and throat with headache, particularly from mists. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness and irregular eye movements.

SKIN CONTACT: No evidence of adverse effects from available information.

EYE CONTACT: Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva. Serious corneal injury is not anticipated.

INGESTION: May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure and pulmonary edema may develop. Severe kidney damage which may be fatal may follow the swallowing of ethylene glycol. A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning.

CHRONIC EFFECTS: Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, particularly dizziness and jerking eye movements. Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals. Ethylene glycol has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined. 2-Ethyl Hexanoic Acid, Sodium Salt is suspected of causing developmental effects based on animal data.

CARCINOGENICITY LISTING: None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

ACUTE TOXICITY VALUES:

Ethylene Glycol: LD50 Oral Rat: 4700 mg/kg
 LD50 Skin Rabbit: 9530 mg/kg

Diethylene Glycol: LD50 Oral Rat: 12,565 mg/kg
 LD50 Skin Rabbit: 11,890 mg/kg

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH:

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations 150, 1,000 and 2,500 mg/m³ for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentrations, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption



of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1,000 and 2,500 mg/m³) and developmental toxicity in with minimal evidence of teratogenicity (2,500 mg/m³). The no-effects concentration (based on maternal toxicity) was 500 mg/m³. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen; there is currently no available information to suggest that ethylene glycol caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity; exposure to high aerosol concentration is only minimally effective in producing developmental toxicity; the major route for producing developmental toxicity is perorally.

Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous invitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

In a study of Wistar rats, adverse developmental results were reported at a dose of 100 mg / kg of body weight for 2-Ethyl Hexanoic Acid, Sodium Salt.

This product contains less than 0.07% tolytriazole which has demonstrates mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolytriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC, ACGIH or OSHA.

12. Ecological Information

ECOTOXICITY:

Ethylene Glycol: LC50 Fathead Minnow <10,000 mg/L/96 hr
EC50 Daphnia Magna 100,000 mg/L/48 hr
Bacterial (*Pseudomonas putida*): 10,000 mg/l
Protozoa (*Entosiphon sulcatum* and *Uronema parduczi*; Chatton-Lwoff): >10,000 mg/l
Algae (*Microcystis aeruginosa*): 2,000 mg/l
Green algae (*Scenedesmus quadricauda*): >10,000 mg/l
Diethylene Glycol: LC50 western mosquitofish >32,000 mg/L/96 hr

PERSISTENCE AND DEGRADABILITY:

Ethylene Glycol is readily biodegradable (97-100% in 2-12 days). Diethylene glycol is readily biodegradable (>70% in 19 days).

BIOACCUMULATIVE POTENTIAL:

Ethylene glycol: A BCF of 10, reported for ethylene glycol in fish, Golden ide (*Leuciscus idus melanotus*), after 3 days of exposure suggests the potential for bioconcentration in aquatic organisms is low.
Diethylene glycol: An estimated BCF of 3 suggests the potential for bioconcentration in aquatic organisms is low.

MOBILITY IN SOIL: Ethylene glycol and diethylene glycol are highly mobile in soil.

OTHER ADVERSE EFFECTS: None known

13. Disposal Considerations

Dispose of product in accordance with all local, state/provincial and federal regulations.

14. Transport Information

U.S. DOT HAZARD CLASSIFICATION: Not Regulated (unless package contains a reportable quantity)



SDS508

PRESTONE ® 50/50 PREDILUTED ENGINE COOLANT/ANTIFREEZE
PRESTONE ® 50/50 READY-TO-USE ANTIFREEZE/COOLANT
Date Prepared: 10/21/2019

Note: IF A SHIPMENT OF A REPORTABLE QUANTITY (8,333 LBS/933 GAL.) IN A SINGLE PACKAGE IS INVOLVED, THE FOLLOWING INFORMATION APPLIES:

PROPER SHIPPING NAME: RQ, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol)

UN NUMBER: UN3082

PACKING GROUP: III

LABELS REQUIRED: Class 9

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

CANADIAN TDG CLASSIFICATION: Not Regulated

15. Regulatory Information

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethylene Glycol (60% maximum) of 5,000 lbs., is 8,333 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA SARA 311/312 HAZARD CLASSIFICATION: Classified under OSHA Hazcom 2012 GHS classification as per Section 2 of this SDS.

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol	107-21-1	30-60%

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CALIFORNIA PROPOSITION 65: This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects):

Ethylene Glycol	107-21-1	30-60%	Developmental

EPA TSCA INVENTORY: All of the components of this material are listed on or exempt from the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on or exempt from the Canadian Domestic Substances List.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on or exempt from the EINECS inventory.

JAPAN: All of the ingredients of this product are listed on or exempt from the Japanese Existing and New Chemical Substances (MITI) List.

AUSTRALIA: All of the ingredients of this product are listed on or exempt from the Australian Inventory of Chemical Substances. The sodium salt of 2-ethylhexanoic acid is not listed on the chemical inventory however, it is a reaction by product of the neutralization of antifreeze and therefore is exempt.

NEW ZEALAND: All of the ingredients of this product are listed on or exempt from the New Zealand Inventory of Chemicals (NZIoC).



SDS508

PRESTONE ® 50/50 PREDILUTED ENGINE COOLANT/ANTIFREEZE
PRESTONE ® 50/50 READY-TO-USE ANTIFREEZE/COOLANT
Date Prepared: 10/21/2019

KOREA: All of the ingredients of this product are listed on or exempt from the Korean Existing Chemical List (KECL).

PHILIPPINES: All of the ingredients of this product are listed on or exempt from the Philippine Inventory of Chemical and Chemical Substance (PICCS)

CHINA: All of the ingredients of this product are listed on or exempt from the Inventory of Existing Chemical Substance in China (IECSC).

16. Other Information

NFPA RATING (NFPA 704) - FIRE: 1 HEALTH: 2 INSTABILITY: 0

REVISION SUMMARY: Section 1: Added formula number.

SDS Date of Preparation/Revision: October 21, 2019

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.



SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PROFORCE HEAVY DUTY DEGREASER

Other means of identification : Not applicable

Recommended use : Degreaser

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 1.54 % - 33.3 %

Company : Ecolab Inc.
4050 Corporate Dr., #100
Grapevine, Texas USA 76051-2326
1-866-999-7484

Emergency telephone : 1-866-897-8061 (US/Canada), 952-852-4656 (outside US)

Issuing date : 04/16/2015

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Eye irritation : Category 2B

Product AT USE DILUTION

Eye irritation : Category 2B

GHS Label element

Product AS SOLD

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**
Wash skin thoroughly after handling.
Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Product AT USE DILUTION

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**
Wash skin thoroughly after handling.
Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Other hazards : None known.

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
Sodium Carbonate(soda)	497-19-8	5 - 10
Sodium Xylenesulfonate	1300-72-7	5 - 10
ethylenediamine tetraacetate	64-02-8	1 - 5
alcohols, c10-14, ethoxylated	66455-15-0	1 - 5

Product AT USE DILUTION

Chemical Name	CAS-No.	Concentration (%)
Sodium Carbonate(soda)	497-19-8	1 - 5
Sodium Xylenesulfonate	1300-72-7	1 - 5
ethylenediamine tetraacetate	64-02-8	1 - 5

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Not flammable or combustible.

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

- Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
Nitrogen oxides (NO_x)
Sulfur oxides
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

- Advice on safe handling : Wash hands thoroughly after handling.
- Conditions for safe storage : Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : -5 °C to 50 °C

Product AT USE DILUTION

- Advice on safe handling : Wash hands thoroughly after handling.
- Conditions for safe storage : Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection : No special protective equipment required.
No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, purple	purple
Odor	: citrus	citrus
pH	: 12.4 - 13.2, 100 %	12.2 - 13.0
Flash point	: Not applicable, Does not sustain combustion.	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: 100 °C	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.12 - 1.14
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: No data available
VOC	: No data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

Eyes	: Causes eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

Product AT USE DILUTION

Eyes	: Causes eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact	: Redness, Irritation
Skin contact	: No symptoms known or expected.
Ingestion	: No symptoms known or expected.
Inhalation	: No symptoms known or expected.

Product AT USE DILUTION

Eye contact	: Redness, Irritation
Skin contact	: No symptoms known or expected.
Ingestion	: No symptoms known or expected.
Inhalation	: No symptoms known or expected.

Toxicity

Product AS SOLD

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available
Skin corrosion/irritation	: Mild skin irritation
Serious eye damage/eye irritation	: Mild eye irritation
Respiratory or skin sensitization	: No data available
Carcinogenicity	: No data available
Reproductive effects	: No data available
Germ cell mutagenicity	: No data available
Teratogenicity	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
Aspiration toxicity	: No data available

Ingredients

Acute dermal toxicity	: alcohols, c10-14, ethoxylated LD50 Rat: > 2,000 mg/kg

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Ingredients

Toxicity to fish : ethylenediamine tetraacetate
96 h LC50 Fish: 121 mg/l

alcohols, c10-14, ethoxylated
96 h LC50 Fish: 1.125 mg/l

Ingredients

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate(soda)
48 h EC50 Daphnia: 200 mg/l

Ingredients

Toxicity to algae : Sodium Xylenesulfonate
96 h EC50: 230 mg/l

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery
Authorization Act Hazardous waste : D002 (Corrosive)

Product AT USE DILUTION

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Not dangerous goods

Sea transport (IMDG/IMO)

Not dangerous goods

Product AT USE DILUTION

Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

Switzerland. New notified substances and declared preparations :
not determined

United States TSCA Inventory :
On TSCA Inventory

Canadian Domestic Substances List (DSL) :
This product contains one or several components listed in the Canadian NDSL.

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :

not determined

Japan. ISHL - Inventory of Chemical Substances (METI) :

not determined

Korea. Korean Existing Chemicals Inventory (KECI) :

not determined

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

not determined

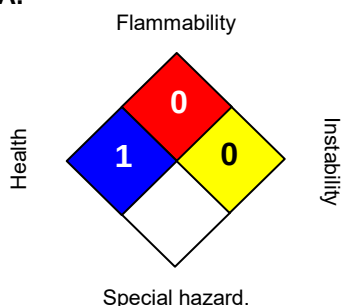
China. Inventory of Existing Chemical Substances in China (IECSC) :

not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



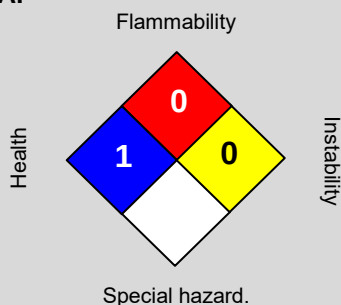
HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Product AT USE DILUTION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Issuing date : 04/16/2015
Version : 1.0
Prepared by : Regulatory Affairs

SAFETY DATA SHEET

PROFORCE HEAVY DUTY DEGREASER

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



SAFETY DATA SHEET

PROPYLENE GLYCOL

Alberta Vet Laboratories Ltd.

Document No.:

SDS-QC.012

Version:1.0

Effective Date: 2020-03-16

SAFETY DATA SHEET

Propylene Glycol

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SDS Name: Propylene Glycol
Product ID: PG4, PG10
Synonyms: 1, 2,-propanediol, 1,2-dihydroxypropane
Chemical Formula: CH₃CHOHCH₂OH
Distributed by: Solvet
7226- 107th Avenue South East
Calgary, Alberta Canada
T2C5N6

For information, call: (403) 456-2245
Emergency number: (613) 996-6666 (CANUTEC)
1-800 463-5060 OR
(418) 656-8090 (Control Poison Center)

2. HAZARDS IDENTIFICATION

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

Potential Health Effects:

Eye Contact: May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.

Skin Contact: Prolonged contact is essentially not irritating to skin. Repeated contact may cause flaking and softening of skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of upper respiratory tract (nose and throat).

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Aspiration Hazard: Based on physical properties, not likely to be an aspiration hazard.

Effects of Repeated Exposure: In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

Label Elements:

Signal Word:

Warning

Hazard Statements

May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure



3. COMPOSITION / INFORMATION ON INGREDIENTS

Name	Amount	CAS #
Propylene Glycol	> 99.5%	57-55-6

Toxicological Data on Ingredients: Propylene glycol: ORAL (LD50): Acute: 20000 mg/kg (Rat). 22,000 mg/kg (Mouse). DERMAL (LD50): Acute: 208000 mg/kg (Rabbit).

4. FIRST AID MEASURES

Eye Contact:

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact:

Wash skin with soap and plenty of water.

Inhalation:

Move person to fresh air; if effects occur, consult a physician.

Ingestion:

No emergency medical treatment necessary. Rinse mouth with water.

Most Important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Extinguishing Media to Avoid: Do not use direct water stream. May spread fire.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/ or ground water. See Section 12, Ecological Information.

Method and materials for containment and cleaning up:

Contain spilled material if possible. Small spills: Any absorbent material. Collect in suitable and properly labeled open containers. Wash the spill site with large quantities of water. Large spills: Dike area to contain spill. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Handling:**General Handling:**

Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto ignition temperature possibly resulting in spontaneous combustion. See Section 8, Exposure Controls and Personal Protection.

Storage:

Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture. Store in the following material(s). Stainless steel. Aluminum. Plasteel 3066 lined container. 316 stainless steel. Opaque HDPE plastic container.

Shelf life:

Use within 12 Months

Maximum Storage Temperature:

40°C

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Limits

Component	List	Type	Value
Propylene Glycol	WEEL	TWA Aerosol	10 mg/m ³

Engineering Controls:

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State:	Liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	No test data available
pH:	Not applicable
Melting point/ Freezing Point:	-60 °C (-76 °F)
Boiling Point:	187°C (369°F)
Flash Point-Closed Cup:	103°C (217°F)
Flash Point-Open Cup:	No test data available
Evaporation Rate (Butyl Acetate=1):	0.01 Estimated
Flammability (solid, gas):	Not applicable to liquids
Flammable Limits In Air:	Lower: 2.6% (V) Estimated Upper: 12.5% (V) Estimated
Vapor Pressure	20 Pa @25°C EC Method A4
Vapor Density (air=1):	2.63
Specific Gravity (H₂O =1):	1.03 20°C / 20°C EU Method A.3 (Relative Density)
Solubility in water (by weight):	100% @ 20°C EU Method A.6 (Water Solubility)
Partition coefficient, n-octanol/water (log Pow):	-1.07 Measured
Autoignition Temperature:	100.01 kPa.400oC (>752oF) EC Method A15
Decomposition Temperature:	No test data available
Dynamic Viscosity:	43.4 mPa.s @ 25°C Literature
Kinematic Viscosity:	No test data available
Explosive properties:	Not explosive
Oxidizing properties:	No
Liquid Density:	1.03 g/cm ³ @ 20°C Literature
Solubility in Solvents:	No test data available
Pour Point:	<-57°C (<-71°F) Literature
Henry's Law Constant (H):	1.2E-08 atm*m ³ /mole Measured

10. STABILITY AND REACTIVITY

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical Stability:	Stable under recommended storage conditions. See Storage, Section 7, Hygroscopic.
Possibility of hazardous reactions:	Polymerization will not occur.
Conditions to Avoid:	Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Avoid direct sunlight or ultraviolet sources.

Incompatible Materials:	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.
Hazardous decomposition products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition Products can include and are not limited to: Aldehydes. Alcohols. Ethers. Organic acids.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
Ingestion:	LD50, rat >20,000 mg/kg
Dermal	LD50, rabbit >2,000 mg/kg
Inhalation	No deaths occurred at this concentration. LC50, 2 h, Aerosol, rabbit 317.042 mg/l
Eye damage/eye irritation	May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.
Skin corrosion/ irritation	Prolonged contact is essentially non-irritating to skin. Repeated contact may cause flaking and softening of skin.
Sensitization	
Skin	Did not cause allergic skin reactions when tested in humans.
Respiratory	No relevant data found
Repeated Dose Toxicity	In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.
Chronic Toxicity and Carcinogenicity	Did not cause cancer in Laboratory animals.
Developmental Toxicity	Did not cause birth defects or any other fetal effects in laboratory animals.
Reproductive Toxicity	In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.
Genetic Toxicology	In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

12. ECOLOGICAL INFORMATION

Toxicity	Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50>100 mg/L in the most sensitive species tested).
Fish Acute & Prolonged Toxicity	LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 h: 40,613 mg/l
Aquatic Invertebrate Acute Toxicity	LC50, Ceriodaphnia Dubia (water flea) static test, 48h: 18,340 mg/l
Aquatic Plant Toxicity	Er50, Pseudokirchneriella subcapitata (green algae), Growth rate inhibition, 96h: 19,000 mg/l
Toxicity to Micro-organisms	NOEC, no data available; Pseudomonas putida, 18h: >20,000 mg/l
Aquatic Invertebrates Chronic Toxicity Value	Ceriodaphnia Dubia (water flea), semi-static test, 7 d, number of offspring, NOEC: 13020 mg/l

Persistence and Degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradable. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
81%	28 d	OECD 301F test	Pass
96%	64 d	OECD 306 Test	Not applicable

Indirect Photo degradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.28E-11 cm ³ /s	10 h	Estimated

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
69.00%	70.00%	86.00%	

Chemical Oxygen Demand: 1.53 mg/mg

Theoretical Oxygen Demand: 1.68 mg/mg

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF<100 or Log Pow<3).

Partition coefficient, n-octanol/water (log Pow): -1.07 Measured

Bioconcentration Factor (BCF): 0.09; Estimated.

Mobility in Soil

Mobility in soil: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process, Potential for mobility in so is very high (Koc between 0 and 50).

Partition coefficient, soil organic carbon/water (Koc): < Estimated.

Henry's Law Constant (H): 1.2 E-08 atm*m³/mole Measured

13. DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

DOT Non –Bulk Not Regulated

DOT Bulk Not Regulated

IMDG Not Regulated

ICAO/IATA Not Regulated



This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard No

Delayed (Chronic) Health Hazard No

Fire Hazard No

Reactive Hazard No

Sudden Release of Pressure Hazard No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/ or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and / or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
Propylene Glycol	57-55-6	>=99.5%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) Section 103

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

US. Toxic Substance Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

CEPA – Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

16. OTHER INFORMATION

Hazard Rating System

NFPA

Health

0

Fire

1

Reactivity

0



The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Alberta Veterinary Laboratory Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Alberta Veterinary Laboratory Ltd. has been advised of the possibility of such damages.

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR

Revision Date: 2020-03-16



SAFETY DATA SHEET

PROTECT-O-METAL

SDS according to the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200), Revision 2012

Section 1. Identification

Product code : 015672-02
Product name : PROTECT-O-METAL
Other means of identification : Not available.

Relevant identified uses of the substance or mixture and uses advised against

Relevant uses : Metal Protection
Uses advised against : Any other purpose.

Supplier : Quaker Houghton PA, Inc.
901 E. Hector Street
Conshohocken, PA 19428 USA
T: 610-832-4000

Wallover Oil Company
21845 Drake Road
Strongsville, OH 44149 USA
www.wallover.com
T: (440) 238-9250

ProductStewardship@quakerhoughton.com
www.quakerhoughton.com

Emergency telephone number (with hours of operation) : CHEMTREC US/Canada: 1-800-424-9300 or 1-703-527-3887 (24 hours)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Section 2. Hazards identification

Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
calcium carbonate	≥25 - ≤50	471-34-1
sodium benzoate	≤3	532-32-1

The exact percentage (concentration) of composition has been withheld as a trade secret

Section 4. First aid measures

Description of necessary first aid measures

General advice	: Get medical attention if symptoms occur. If medical advice is needed, have product container or label at hand. Use personal protective equipment as required. Remove contaminated clothing and wash it before reuse. Wash skin surfaces thoroughly after contact.
Inhalation	: Move affected person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
Skin contact	: Brush off loose particles from skin. Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse.
Eye contact	: Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do.
Ingestion	: Ingestion may cause gastrointestinal irritation and diarrhea. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Inhalation	: Not expected under normal use.
Skin contact	: Not expected under normal use.
Eye contact	: Not expected under normal use.
Ingestion	: Not expected under normal use.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Treat symptomatically.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Use personal protective equipment as required.

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO₂) nitrogen oxides metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see Section 8). Keep unnecessary personnel away.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not breathe dust. Do not ingest.

Section 7. Handling and storage

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- Storage temperature** : Store between the following temperatures: 5 to 37°C (41 to 98.6°F).
- Shelf life** : 12 months

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
calcium carbonate	NIOSH REL (United States, 10/2016). TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction
sodium benzoate	TWA: 10 mg/m ³ 10 hours. Form: Total None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep equipment clean.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Section 8. Exposure controls/personal protection

- Other skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use. Use appropriate respiratory protection if there is a risk of exceeding any exposure limits.
- Thermal hazards** : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Paste.]
- Color** : Gray.
- Odor** : Mild.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : >20°C (>68°F)
- Boiling point** : >35°C (>95°F)
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.366
- Solubility** : Easily soluble in the following materials: cold water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm²/s (>20.5 cSt)

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific measures identified.
- Incompatible materials** : Strong oxidizing materials. strong acids. strong alkalis

Section 10. Stability and reactivity

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Not available.

Numerical measures of toxicity

Product/ingredient name	Result	Species	Dose	Exposure
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-
sodium benzoate	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	4070 mg/kg	-

Irritation/Corrosion : Based on available data, the classification criteria are not met.

Product/ingredient name	Result	Species	Score	Exposure	Observation
calcium carbonate	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Reproductive toxicity : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

Other information : None identified.

Information on the likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

None identified.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Not expected under normal use.

Skin contact : Not expected under normal use.

Eye contact : Not expected under normal use.

Ingestion : Not expected under normal use.

Section 12. Ecological information

No known significant effects or critical hazards.

Toxicity

Product/ingredient name	Result	Species	Exposure
calcium carbonate	Acute LC50 >56000 ppm Fresh water Chronic NOEC 61 mg/g Fresh water	Fish - Gambusia affinis - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 42 days
sodium benzoate	Acute EC50 30.5 mg/l Acute LC50 484000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata Fish - Pimephales promelas	72 hours 96 hours

Persistence and degradability

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
sodium benzoate	-2.27	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Empty containers retain product residue and can be hazardous. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Section 14. Transport information

Additional information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations

Clean Water Act (CWA) 311

None of the components are listed.

Clean Water Act (CWA) 307

None of the components are listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

None of the components are listed.

CERCLA: Hazardous substances.

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this regulation, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

SARA 302/304

None of the components are listed.

SARA 311/312

Classification : See GHS Classification in section 2 for hazard class information

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California

California Prop. 65

This product does not contain any Proposition 65 chemicals.

SCAQMD Rule 1144

This product has not been tested for VOC content by the ASTM E-1868-10 (2021) method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid

International regulations

Montreal Protocol

Section 15. Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

United States : All components are active or exempted.

Canada : All components are listed or exempted.

Section 16. Other information

Date of issue/Date of revision : 11/8/2021

Version : 3

Quaker Houghton Product Stewardship

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations
 VOC = Volatile Organic Compound

References : **Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .**

🔹 Indicates information that has changed from previously issued version.

Notice to reader

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is correct to the best of our knowledge, information and belief at the date of its publication. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.

PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

SECTION 1. IDENTIFICATION

Product name : PURELL® Advanced Hand Sanitizer Sanitizing Gel

Manufacturer or supplier's details

Company name of supplier : GOJO Industries, Inc.
Address : One GOJO Plaza, Suite 500
Akron, Ohio 44311
Telephone : 1 (330) 255-6000
Emergency telephone : CHEMTREC 1-800-424-9300
number : CHEMTREC +1-703-527-3887: Outside USA & CANADA

Recommended use of the chemical and restrictions on use

Recommended use : Hand Sanitizer
Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3
Eye irritation : Category 2A

GHS label elements

Hazard pictograms :  

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. -
No smoking.
P233 Keep container tightly closed.

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
Ethyl Alcohol	64-17-5	>= 60 - < 70

SECTION 4. FIRST AID MEASURES

General advice	: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	: If inhaled, remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash with water and soap as a precaution. Get medical attention if irritation develops and persists.
In case of eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Seek medical advice.
If swallowed	: If swallowed, DO NOT induce vomiting. Rinse mouth with water. Obtain medical attention.
Most important symptoms and effects, both acute and delayed	: Causes serious eye irritation.
Protection of first-aiders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing

SECTION 5. FIREFIGHTING MEASURES

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Flash back possible over considerable distance. May form explosive mixtures in air. Exposure to decomposition products may be a hazard to health. Carbon oxides
Hazardous combustion products	: Carbon oxides
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Material can create slippery conditions.
Environmental precautions	: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	: Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: For personal protection see section 8. Keep away from heat. Use with local exhaust ventilation. Avoid contact with eyes.


PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Conditions for safe storage : Take measures to prevent the build up of electrostatic charge.
 Keep in properly labelled containers.
 Keep container tightly closed in a dry and well-ventilated place.
 Store in accordance with the particular national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethyl Alcohol	64-17-5	TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		STEL	1,000 ppm	ACGIH

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection : No special protective equipment required.

Remarks : No special protective equipment required.

Eye protection : Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : No special protective equipment required.

Protective measures : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
 Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
 Avoid contact with eyes.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : gel

Colour : clear, colourless, yellow

Odour : citrus

Odour Threshold : No data available

pH : 6.5 - 8.5, (20 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling range : 70 °C

Flash point : 25 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.87 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: not determined
Thermal decomposition	: The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic	: 3500 - 23000 mm ² /s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Eye contact
Skin contact

Acute toxicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 124.7 mg/l

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Exposure time: 4 h
Test atmosphere: vapour

Skin corrosion/irritation

Not classified based on available information.

Components:**Ethyl Alcohol:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:**Ethyl Alcohol:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:**Ethyl Alcohol:**

Test Type: Local lymph node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse

Result: negative

Germ cell mutagenicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)
Test species: Mouse
Application Route: Ingestion
Result: negative

Carcinogenicity

Not classified based on available information.

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Effects on fertility

: Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****Ethyl Alcohol:**

Species: Rat

NOAEL: 2,400 mg/kg

Application Route: Ingestion

Exposure time: 2 y

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Ethyl Alcohol:**

Toxicity to fish

: LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other
aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h

Toxicity to algae

: EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other
aquatic invertebrates
(Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 9.6 mg/l
Exposure time: 9 d

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 32.1 mg/l
Exposure time: 0.25 h

Persistence and degradability**Components:****Ethyl Alcohol:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 20 d

Bioaccumulative potential**Components:****Ethyl Alcohol:**

Partition coefficient: n-octanol/water : log Pow: -0.35

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****IATA-DGR**

UN/ID No. : UN 1170
Proper shipping name : Ethanol solution
Class : 3
Packing group : III
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

IMDG-Code

UN number : UN 1170
Proper shipping name : ETHANOL SOLUTION
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-D
Marine pollutant : no

National Regulations**49 CFR**

UN/ID/NA number : UN 1170
Proper shipping name : Ethanol solutions
Class : 3
Packing group : III
ERG Code : 127
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act**

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Ethyl Alcohol	64-17-5	65.2815 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65 : This product does not require a warning label under California Proposition 65.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory


PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

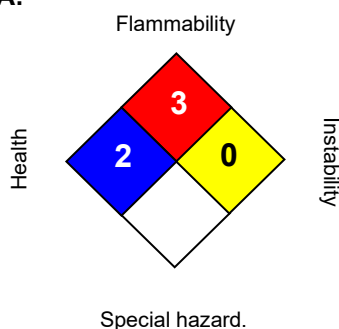
SDS Number: 400000005869

Revision Date: 04/21/2020

AICS	: On the inventory, or in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 04/21/2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SAFETY DATA SHEET

1. Identification

Identification

Product name: QUINSYN PG

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Formulated Industrial Lubricant

Restrictions on use: None identified.

Details of the supplier of the safety data sheet

Supplier

Company Name: Quincy Compressor

Address: 701 N. Dobson Avenue
Bay Minette, AL 36507

Telephone: 251-937-5900

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Toxic to reproduction	Category 2

Unknown toxicity

Acute toxicity, inhalation, vapor	28.1 %
Acute toxicity, inhalation, dust or mist	93.8 %

Label Elements:

Hazard Symbol:



Signal Word:

Warning

Hazard Statement: Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.

Precautionary Statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards which do not result in GHS classification: None identified.

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Polyether polyol	9003-13-8	60 – 70%
Alkarylamine	68411-46-1	5 – 10%
Barium sulfonate	25619-56-1	0.1 – 0.5%

4. First-aid measures

General information: IF exposed or concerned: Get medical advice/attention.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/ physician if you feel unwell. Get medical attention if symptoms occur.

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Skin Contact: Launder contaminated clothing before reuse. Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention.

Eye contact: Rinse cautiously with water for several minutes. Flush thoroughly with water. If irritation occurs, get medical assistance. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Use water to cool containers exposed to fire. No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: CO₂, dry chemical, foam, water spray, water fog. CO₂, dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: See section 10 for additional information. Burning may produce irritating, toxic and obnoxious fumes. Container may rupture on heating. Material creates a special hazard because it floats on water.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: No data available.

Special protective equipment for fire-fighters: Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Recommend wearing self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.

Environmental Precautions: Material will float on water. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid contact with skin. Avoid contact with eyes. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Launder contaminated clothing before reuse.

Maximum Handling Temperature: Not determined.

Conditions for safe storage, including any incompatibilities: Store away from incompatible materials. See section 10 for incompatible materials.

Maximum Storage Temperature: Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate engineering controls: No special requirements under ordinary conditions of use and with adequate ventilation. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Wear tight-fitting goggles or face shield. Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

Skin Protection
Hand Protection: Polyvinyl chloride (PVC).

Other:	Long sleeve shirt is recommended. Do not wear rings, watches or similar apparel that could entrap the material. Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.
Respiratory Protection:	A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Use respirator with an organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Use respirator with an organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded.
Hygiene measures:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Avoid contact with skin. Avoid contact with eyes. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product. Wash hands after handling.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless to yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	Not applicable
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	> 525.0 °F (273.9 °C) (Cleveland Open Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.977 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Slightly Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	48.3 mm ² /s (104 °F (40 °C)) 9.4 mm ² /s (100 °C (212 °F))

Other information

Bulk density: 8.15 lb/gal 77 °F (25 °C)

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
Incompatible Materials:	Avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials that react with hydroxyl compounds. Strong acids. Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	Harmful if swallowed.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.

Information on toxicological effects

Acute toxicity

Oral

Product: ATEmix 300 - 2,000 mg/kg. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Polyether polyol	Vapour: LC 50 (Rat,): Not classified Vapour
Alkarylamine	Vapour: LC 50 Not classified Vapour Dust and mist: LC 50 Not classified Dust and mist

Skin Corrosion/Irritation:

Product:

Remarks: Prolonged or repeated contact may cause irritation.
Causes skin irritation.

Serious Eye Damage/Eye Irritation:

Product:

Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

Alkarylamine

Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer.

Barium sulfonate

Classification: May cause sensitization by skin contact. (Literature)
Remarks: Category 1

Specific Target Organ Toxicity - Single Exposure:

Polyether polyol

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Alkarylamine

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Barium sulfonate

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Aspiration Hazard:

No data available

Other effects:

Chronic Effects

Carcinogenicity:

No data available

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity:

Alkarylamine

In vitro and in vivo genetic toxicity studies were negative.

Reproductive toxicity:

Alkarylamine Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure:

Alkarylamine Oral: Target Organ(s): Liver, Kidney

12. Ecological information

Ecotoxicity

Fish

Alkarylamine LC 50 (Zebra Fish, 4 d): > 100 mg/l

Aquatic Invertebrates

Alkarylamine EC 50 (Water flea (Daphnia magna), 2 d): 51 mg/l
NOEC (Water Flea (Daphnia Magna), 21 d): 1.69 mg/l

Toxicity to Aquatic Plants

Alkarylamine EC 50 (Green algae (Scenedesmus quadricauda), 3 d): > 100 mg/l
NOEC (Green algae (Scenedesmus quadricauda), 3 d): 10 - 100 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Alkarylamine EC 50 (Sludge, 3 h): > 100 mg/l

Persistence and Degradability

Biodegradation

Alkarylamine OECD TG 301 B, 1 %, 28 d, Not readily degradable. (The product is not biodegradable.)

Bioaccumulative potential

Bioconcentration Factor (BCF)

Alkarylamine Common Carp, Bioconcentration Factor (BCF): 1,730 (Read across)
Based on experimental data this material is not bioaccumulative.

Partition Coefficient n-octanol / water (log Kow)

Alkarylamine Log Kow: > 5 25 °C (calculated)

Mobility:

No data available

Other adverse effects

No data available

13. Disposal considerations

Disposal instructions: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

14. Transport information

DOT
Not regulated.

IMDG
Not regulated.

IATA
Not regulated.

Transport in bulk according to Annex II of MARPOL and the IBC Code
None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. During transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

TSCA Section 5(a)2 Significant New Use Rule (SNURs) (40CFR 721, Subpt E)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4)
None present or none present in regulated quantities.

Superfund amendments and reauthorization act of 1986 (SARA)

SARA 311 Classifications

Acute toxicity (any route of exposure)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Reproductive toxicity

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

Inventory Status

Australia (AIC)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Great Britain (UK REACH)

To obtain information on the UK REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

May require notification before sale under New Zealand regulations.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

Turkey (KKDIK)

To obtain information on the KKDIK compliance status of this product, please e-mail
REACH@SDSInquiries.com.

United States (TSCA)

All substances contained in this product are listed on the TSCA inventory or are exempt.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

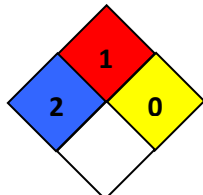
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	*	2
Flammability		1
Physical Hazards		0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 02/10/2023

Version #: 7.0

Source of information: Internal company data and other publically available resources.

Further Information: Contact supplier (see Section 1)

Disclaimer:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.

Material Safety Data Sheet

**Mouse & Rat Glue Trap
(Superfine 45g/piece)**

**Beijing Green Leaf Century Daily-use Chemicals Co. Ltd
No. 8 Jing-Da Rd.
Daxing Industrial Development Zone
Beijing, 100076
People's Republic of China
Tel. (86 10) 61282636
Fax: (86 10) 61288573
Email: soniabjgreenleaf@hotmail.com**

MATERIAL SAFETY DATA SHEET

Effective Date: April 20, 2007

MSDS No. 100058

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Mouse & Rat Glue Trap

Trade Name: Mouse & Rat Glue Trap

Manufacturer/Supplier: Beijing Green Leaf Century Daily-use Chemicals Co. Ltd
No. 8 Jing-Da Rd.
Daxing Industrial Development Zone
Beijing, 100076
People's Republic of China
Tel. (8610) 61282636
Fax: (8610) 61288573
Emergency: (86) 13611194762
Email: soniabjgreenleaf@hotmail.com

2. COMPOSITIONS AND INFORMATION ON INGREDIENTS

Component	CAS No.	% (w/w)	EINECS No.	EU - Classification
Butyl rubber *	68441-14-5	6-10	Exempt	—
Polyisobutylene *	9003-27-4	10-20	Exempt	—
White mineral oils	8042-47-5	45-60	232-455-8	—
Polyethylene *	9002-88-4	1-6	Exempt	—
Oil resin *	69430-35-9	20-30	Exempt	—

Exempt polymers whose monomers are listed on EINECS.

3. HAZARD IDENTIFICATION

This product is considered an "article", and not classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Physical/Chemical Hazards: Chemical components in the product have incorporated into the structure of the products, and exposure to the components is not anticipated under normal conditions of use.

Human health hazards: Exposure to chemical components is not anticipated in normal use.

Direct contact may cause irritation to the eyes. Under normal condition of use, the product is incapable of releasing constituents.

Environmental Hazards: Unlikely to be harmful to aquatic organisms

4. FIRST AID

There are no known acute, immediate effects requiring treatment as a result of the use of this product as supplied.

Note to Physician: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flash point >180 °C (White mineral oils)

Auto ignition temperature: NA

Flammability Limits: LFL Not applicable: NA

UFL Not applicable: NA

Hazardous Combustion Products: Under fire conditions, the product decomposes; produced smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating

MATERIAL SAFETY DATA SHEET

Effective Date: April 20, 2007

MSDS No. 100058

compounds. Hazardous combustion products may include and are not limited to carbon monoxide and carbon dioxide, and other small molecular weight hydrocarbons.

Extinguishing Media: Water fog, carbon dioxide, or dry chemical.

Fire Fighting Instructions: Keep people away. Isolate fire area and deny unnecessary entry. Molten plastics, dust can cause explosion hazards. Do not use direct water stream, which may spread fire. Fight fire from protected location or safe distance.

Protective Equipments for Fire Fighting: Firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

No special precautions are needed.

7. HANDLING AND STORAGE

Handling: No special precautions are needed.

Storage: Avoid store near heat or flame. Do not expose to direct sunlight and keep away from small children and pets.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component Occupational Exposure Limits

The EU, ACGIH, German DFG, United Kingdom and Sweden have not developed exposure limits for any of this product's components.

Engineering Controls: Not required in particular

Eye Protection: None required in normal use.

Skin Protection: None required in normal use.

Respiratory Protection: None required in normal use.

General: Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Product is a manufactured article in the form of a tube containing some combination of polymers and Petroleum hydrocarbons.

10. STABILITY AND REACTIVITY

Stability: Stable under normal handling conditions.

Conditions to Avoid: Excess heating.

Material to Avoid: Strong acids and strong oxidizing agents (e.g. nitric acid or perchloric acid).

Hazardous Decomposition Products: Refer to section 5 for Hazardous Combustion Products.

Hazardous Polymerization: Will not occur by itself.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Analysis

White mineral oils (8042-47-5): Oral LD50 Rat: >5000 mg/kg

Polyethylene (9002-88-4): Inhalation LC50 Mouse: 12 gm/m3/30M

Carcinogenicity

Component Carcinogenicity

Polyethylene (9002-88-4):

IARC Cancer Review – Group 3 (Not classifiable); Supplement 7 (1987), Monograph 19 (1979)

MATERIAL SAFETY DATA SHEET

Effective Date: April 20, 2007

MSDS No. 100058

Mutagenicity No data available for this product.
Teratogenicity No data available for this product.

12. ECOLOGICAL INFORMATION

Ecotoxicity: NA
BOD5 and COD: NA
Biodegradable: NA
Mobility: NA
Toxicity of the Products of Biodegradation: NA

13. DISPOSAL CONSIDERATIONS

Disposal: Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all applicable federal, state/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

International Transportation Regulations:

US DOT: Not regulated as a hazardous material or dangerous goods for transportation.
ICAO/IATA: Not regulated as a hazardous material or dangerous goods for transportation.
IMO/IMDG: Not regulated as a hazardous material or dangerous goods for transportation.
RID/ADR: Not regulated as a hazardous material or dangerous goods for transportation.

15. REGULATORY INFORMATION

European Union Regulatory Information

Label Requirements

R-Phrases/S-phrases: This product is not classified according to the EU regulations.

Additional Regulatory Information:

Component Analysis – Inventory

Component	CAS #	TSCA (US)	DSL (Canada)	EINECS (EU)	ENCS (Japan)	IECSC (China)
Butyl rubber	68441-14-5	Exempt	Yes	Exempt	Yes	Yes
Polyisobutylene	9003-27-4	Exempt	Yes	Exempt	Yes	Yes
White mineral oils	8042-47-5	Yes	Yes	Yes	Yes	Yes
Polyethylen	9002-88-4	Exempt	Yes	Exempt	Yes	Yes
Oil resin	69430-35-9	Exempt	Yes	Exempt	Yes	Yes

16. OTHER INFORMATION

Disclaimer:

Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Key/Legend

NA = Not available or Not Applicable. ND = Not determined or No data. MAC = Maximum Allowable Concentration. TWA = Time Weighted Average. ACGIH = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. TSCA = Toxic Substance

MATERIAL SAFETY DATA SHEET

Effective Date: April 20, 2007

MSDS No. 100058

Control Act. DSL = Domestic Substances List (Canada). INCI = Inventory of Cosmetic Ingredients Directive; IECSC = Inventory of Existing Chemical Substances. OEL = Occupational Exposure Limit

Contact: Yu shuxi

Contact Phone: (86) 13611194762

THIS IS THE END OF MSDS 100058

SAFETY DATA SHEET

Lucas Red "N" Tacky NLGI # 2 grease



Section 1. Identification

GHS product identifier : Lucas Red "N" Tacky NLGI # 2 grease
Other means of identification : Not available.
Product number : 10005, 10027, 10028, 10029, 10574

Relevant identified uses of the substance or mixture and uses advised against

Engine oil.

Supplier's details : Lucas Oil Products, Inc
302 North Sheridan Street
Corona, California 92880-2067
Toll Free: (800) 342-2512
Tel: (951) 270-0154
Fax: (951) 270-1902
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149
(951) 847-5949
Markn@lucasoil.com

7:00A.M. to 5:00P.M. Monday thru Friday

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear eye or face protection. Avoid release to the environment. Wash hands thoroughly after handling.





Section 2. Hazards identification

- Response** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

- CAS number** : Not applicable.
- Product code** : Not available.

Ingredient name	%	CAS number
Zinc Alkyldithiophosphate	1 - 5	68649-42-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.





Section 4. First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : No specific data.





Section 5. Fire-fighting measures

Special protective actions for fire-fighters : No special precaution is required.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.





Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Grease.]
- Color** : Red.
- Odor** : Mild. Petroleum oil.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point** : Not available.
- Boiling point** : Not available.





Section 9. Physical and chemical properties

Flash point	: Not available.
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.9
Solubility	: Negligible at 25°C
Solubility in water	: 0 g/l
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (100°C (212°F)): 0.19 cm ² /s (19 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Excessive heat.
Incompatible materials	: Reactive or incompatible with the following materials: strong oxidizers.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Alkyldithiophosphate	Eyes - Irritant	Rabbit	-	-	-

Sensitization

Skin	: There is no data available.
Respiratory	: There is no data available.





Section 11. Toxicological information

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.





Section 11. Toxicological information

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc Alkyldithiophosphate	Acute EC50 1 to 5 mg/L Acute EC50 1 to 1.5 mg/L Chronic LC50 1 to 5 mg/L	Algae Crustaceans Fish	96 hours 48 hours 96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.





Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** Zinc Alkyldithiophosphate
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc Alkyldithiophosphate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.





Section 15. Regulatory information

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Zinc Alkyldithiophosphate	1 - 5	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Zinc Alkyldithiophosphate	68649-42-3	1 - 5
Supplier notification	Zinc Alkyldithiophosphate	68649-42-3	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

: None of the components are listed.

New York

: None of the components are listed.

New Jersey

: The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Zinc Alkyldithiophosphate

Pennsylvania

: The following components are listed: Zinc Alkyldithiophosphate

California Prop. 65

No products were found.

International regulations

International lists

: **Australia inventory (AICS)**: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

Chemical Weapons

: Not listed

Convention List Schedule I Chemicals

Chemical Weapons

: Not listed

Convention List Schedule II Chemicals

Chemical Weapons

: Not listed

Convention List Schedule III Chemicals





Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * **Flammability :** 0 **Physical hazards :** 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 **Flammability :** 0 **Instability :** 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue mm/dd/yyyy : 02/15/2014
Version : 1
Revised Section(s) : Not applicable.
Prepared by : KMK Regulatory Services Inc.
Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



SAFETY DATA SHEET

R7K15

Section 1. Identification

Product name : Reducer No. 15
Product code : R7K15
Other means of identification : Not available.
Product type : Liquid.
Relevant identified uses of the substance or mixture and uses advised against
Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (216) 566-2917
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Regulatory Information Telephone Number : US / Canada: (216) 566-2902
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (dermal) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 48.1%

GHS label elements

Hazard pictograms : 

Signal word : Danger

Section 2. Hazards identification

Hazard statements : Highly flammable liquid and vapor.
Harmful in contact with skin or if inhaled.
Causes serious eye irritation.
Causes skin irritation.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection.
Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Methyl Isobutyl Ketone	≥25 - ≤50	108-10-1
Xylene, mixed isomers	≥25 - ≤50	1330-20-7
Ethylbenzene	≤10	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 4. First aid measures

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Methyl Isobutyl Ketone	ACGIH TLV (United States, 3/2018). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. NIOSH REL (United States, 10/2016). TWA: 50 ppm 10 hours. TWA: 205 mg/m ³ 10 hours. STEL: 75 ppm 15 minutes. STEL: 300 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 410 mg/m ³ 8 hours.
Xylene, mixed isomers	ACGIH TLV (United States, 3/2018). TWA: 100 ppm 8 hours. TWA: 434 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018).

Section 8. Exposure controls/personal protection

Ethylbenzene	TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours. ACGIH TLV (United States, 3/2018). TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Methyl isobutyl ketone	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 205 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. 15 min OEL: 75 ppm 15 minutes. 15 min OEL: 307 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 7/2018). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 1/2018). TWA: 20 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWA_{EV}: 50 ppm 8 hours. TWA_{EV}: 205 mg/m³ 8 hours. STEV: 75 ppm 15 minutes. STEV: 307 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 75 ppm 15 minutes. TWA: 50 ppm 8 hours.
Xylene	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 7/2018). TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWA_{EV}: 100 ppm 8 hours. TWA_{EV}: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 1/2018). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.
Ethylbenzene	CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 8 hrs OEL: 434 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

	15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes. CA British Columbia Provincial (Canada, 7/2018). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEL: 100 ppm 8 hours. TWAEL: 434 mg/m³ 8 hours. STEL: 125 ppm 15 minutes. STEL: 543 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Methyl Isobutyl Ketone	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.
Xylene, mixed isomers	STEL: 75 ppm 15 minutes. NOM-010-STPS-2014 (Mexico, 4/2016). STEL: 150 ppm 15 minutes.
Ethylbenzene	TWA: 100 ppm 8 hours. NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 20 ppm 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : 113°C (235.4°F)
- Flash point** : Closed cup: 18°C (64.4°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 1.62 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1%
Upper: 7.5%
- Vapor pressure** : 2.1 kPa (16 mm Hg) [at 20°C]
- Vapor density** : 3.45 [Air = 1]
- Relative density** : 0.83
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)
- Molecular weight** : Not applicable.

Aerosol product

- Heat of combustion** : 31.299 kJ/g

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methyl Isobutyl Ketone	LD50 Oral	Rat	2080 mg/kg	-
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl Isobutyl Ketone	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Eyes - Severe irritant	Rabbit	-	40 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Ethylbenzene	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Methyl Isobutyl Ketone	-	2B	-
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Methyl Isobutyl Ketone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene, mixed isomers	Category 3	Not applicable.	Respiratory tract irritation
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Methyl Isobutyl Ketone	Category 2	Not determined	Not determined
Xylene, mixed isomers	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2810 mg/kg
Dermal	1296.3 mg/kg
Inhalation (gases)	11348.6 ppm
Inhalation (vapors)	19.69 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Methyl Isobutyl Ketone	Acute LC50 505000 µg/l Fresh water Chronic NOEC 78 mg/l Fresh water Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas Daphnia - Daphnia magna Fish - Pimephales promelas - Embryo	96 hours 21 days 33 days
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Ethylbenzene	Acute LC50 13400 µg/l Fresh water Acute EC50 4600 µg/l Fresh water Acute EC50 3600 µg/l Fresh water Acute EC50 6.53 mg/l Marine water Acute EC50 2.93 mg/l Fresh water Acute LC50 4200 µg/l Fresh water	Fish - Pimephales promelas Algae - Pseudokirchneriella subcapitata Algae - Pseudokirchneriella subcapitata Crustaceans - Artemia sp. - Nauplii Daphnia - Daphnia magna - Neonate Fish - Oncorhynchus mykiss	96 hours 72 hours 96 hours 48 hours 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Methyl Isobutyl Ketone	-	-	Readily
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	II	II	II	II	II
Environmental hazards	No.	No.	No.	No.	No.
Additional information	- ERG No. 128	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). ERG No. 128	- ERG No. 128	-	Emergency schedules F-E, S-E

Section 14. Transport information

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.
Ship type : Not available.
Pollution category : Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

International lists : **Australia inventory (AICS)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		3
Physical hazards		0

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Section 16. Other information

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

History

Date of printing : 6/14/2019

Date of issue/Date of revision : 6/14/2019

Date of previous issue : 5/24/2019

Version : 7.01

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.



SAFETY DATA SHEET

Section 1 – Product & Company Identification

Product Name: RIDGID Dark Thread Cutting Oil (United States)

Product Catalog No.: 11471, 11491, 41590, 41600, 41610, 70830

Recommended Use: Thread Cutting

Restrictions on Use: Industrial use only

Company Information:

<u>North America</u> Ridge Tool Company 400 Clark Street Elyria, Ohio 44035-6001 1-800-519-3456 (8:00 am – 5:00 pm EST, M-F) Emergency Telephone call 9-1-1 or local emergency number www.RIDGID.com	<u>Australia</u> Ridge Tool Australia 127 Metrolink Circuit Campbellfield, VIC 3061 1-800-743-443 (8:30 am – 5:00 pm AEST, M-F) Emergency Telephone call 000 or local emergency number www.RIDGID.com.au

Operating Standard: 6-103
Revision: J
EC Number 45297
Issue Date: October 19, 2020
Last Revision Date May 2, 2018

- Français – 12
- Castellano – pág. 23



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 2 – Hazards Identification

Hazard Classification

This product is classified as not hazardous per US OSHA 29CFR 1910.1200 (HazCom 2012)

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Precautionary Statements Not applicable

Other hazards which do not result in GHS classification: None.

Section 3 – Composition / Information On Ingredients

General information: This product does not contain silicone or chlorinated additives.

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Mineral oil	Confidential	20 - <50%
Paraffin oils	Confidential	20 - <50%

Specific chemical identities and/or exact percentages have been withheld as trade secrets.

Section 4 – First Aid Measures

Ingestion: Rinse mouth thoroughly. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting.

Inhalation: Move to fresh air. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: Remove contaminated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

Section 5 – Fire Fighting Measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, fog, CO₂, dry chemical, or regular foam. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Heat may cause the containers to explode. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 6 – Accidental Release Measures

**Personal precautions,
protective equipment and
emergency procedures:**

See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ensure adequate ventilation.

**Methods and material for
containment and cleaning
up:**

Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk.

Environmental Precautions:

Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Section 7 – Handling And Storage

Precautions for safe handling:

End-users should follow industry best practices for handling and using this product.

Guidance may be found using the current version of ASTM Standard E1497-05: Standard Practice for Selection and Safe Use of Water-Miscible and Straight Oil Metal Removal Fluids Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container.

**Conditions for safe storage,
including any
incompatibilities:**

Shelf Life: 720 Days Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 8 – Exposure Controls / Personal Protection

Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Mineral oil - Mist.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (01 2017)
Mineral oil - Mist.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Paraffin oils - Inhalable fraction.	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2014)
Paraffin oils - Mist.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Paraffin oils - Mist.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)

Protective Measures:

Use personal protective equipment as required.

Respiratory Protection:

In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards.

Eye Protection:

Wear safety glasses with side shields (or goggles).

Skin and Body Protection:

Wear protective clothing appropriate for the risk of exposure. Be aware of other hazards such as rotating parts. Contact health and safety professional or manufacturer for specific information. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 9 – Physical And Chemical Properties

Appearance

Physical state:	liquid
Form:	No data available.
Color:	Black
Odor:	Mild petroleum/solvent
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	196.11 °C (385.00 °F)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.878
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	42.5 mm ² /s (40 °C, Measured)
Other information	
VOC:	1.99 g/l (ASTM E 1868-10) 1.3 % (Method 24)



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 10 – Stability And Reactivity

Reactivity:	Not reactive during normal use.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	None under normal conditions.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Section 11 – Toxicological Information

Information on likely routes of exposure

Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.
Inhalation:	Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Prolonged skin contact may cause redness and irritation.
Eye contact:	Eye contact is possible and should be avoided.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix (): 2000 - 5000 mg/kg
Dermal Product:	ATEmix (): 2000 - 5000 mg/kg



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 12 – Ecological Information

General information:

This product has not been evaluated for ecological toxicity or other environmental effects.

Section 13 – Disposal Consideration

Disposal instructions:

Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied.

Contaminated Packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14 – Transportation Information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 15 – Regulatory Information

US Federal Regulations

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not classified as hazardous under GHS

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.



Product Name : RIDGID Dark Thread Cutting Oil (United States)

Section 16 – Other Information

Prepared by:..... Ridge Tool Company

OPSTD 6-103

Revision J

EC Number 45297

Issue Date: October 19, 2020

Last Revision Date: May 2, 2018

RIDGE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.



FICHE SANTÉ/SÉCURITÉ

1 – Identification du produit et du fournisseur

Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)
Réf. catalogue: 11471, 11491, 41590, 41600, 41610, 70830
Emploi recommandé: Filetage mécanique
Restrictions d'utilisation: Usage industriel seulement
Fournisseur:

North America
Ridge Tool Company
400 Clark Street
Elyria, Ohio 44035-6001
1-800-519-3456
(Etats-Unis) (du lundi au vendredi de 8h à 17h EST)
Téléphone d'urgence:
composer le 9-1-1 ou appeler les services d'urgences appropriés
www.RIDGID.com

Norme De Fonctionnement: 6-103
Révision: J
EC: 45297
Date de publication: 19 octobre 2020
Dernière revision: le 2 mai 2018



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

2 – Identification des risques

Classe de Danger

Non classé comme dangereux selon le SGH

Éléments d'Étiquetage

Symbole de Danger:	Aucun symbole
Mention d'Avertissement:	Aucun mot indicateur.
Mention de Danger:	Non applicable
Conseils de Prudence	Non applicable

Autres dangers ne donnant pas lieu à classement selon le SGH:

Aucun(e).

3 – Composition du produit et renseignements sur ses ingrédients

Informations générales:

Ce produit ne contient pas de silicone ou d'additifs chlorés.

Composant(s) dangereux:

Désignation chimique	N° CAS	Concentration
Mineral oil	Confidentiel	20 - <50%
Paraffin oils	Confidentiel	20 - <50%

Les identités chimiques spécifiques et/ou les pourcentages exacts ont été refusées comme les secrets commerciaux.

4 – Premiers soins

Ingestion:

Rincer soigneusement la bouche. Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise. NE PAS faire vomir.

Inhalation:

Transporter à l'air frais. Appeler un CENTRE ANTIPOISON/un médecin en cas de malaise.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

Contact avec la Peau: Enlever les vêtements et les chaussures contaminés. Laver les zones de contact à l'eau et au savon. En cas d'irritation cutanée: consulter un médecin.

Contact oculaire: Rincer avec soin à l'eau. En cas d'irritation, consulter un médecin. Continuer à rincer pendant au moins 15 minutes.

Symptômes/effets les plus importants, aigus et différés

Symptômes: Aucune information disponible.

Indication d'un besoin médical immédiat et traitement spécial requis

Traitement: Consulter un médecin en cas de symptômes.

5 – Lutte contre les incendies

Dangers d'Incendie Généraux: Aucun risque exceptionnel d'incendie et d'explosion.

Moyens d'extinction appropriés (et inappropriés)

Moyens d'extinction appropriés: Eau pulvérisée, brouillard, CO₂, agent chimique sec ou mousse standard. Choisir le moyen d'extinction de l'incendie en tenant compte d'autres produits chimiques éventuels.

Moyens d'extinction inappropriés: Ne pas lutter contre l'incendie au jet d'eau pour ne pas propager les flammes.

Dangers spécifiques dus au produit chimique: La chaleur peut provoquer l'explosion des récipients. En cas d'incendie, des gaz dangereux pour la santé peuvent se former.

Équipement de protection spécial et précautions pour les pompiers

Procédures spéciales de lutte contre l'incendie: Aucune information disponible.

Équipement de protection spécial pour le personnel préposé à la lutte contre le feu: Les pompiers doivent porter un équipement de protection standard, notamment vêtement ignifuge, casque à masque facial, gants, bottes en caoutchouc et, dans les espaces clos, un appareil respiratoire autonome.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

6 – Lutte contre les déversements accidentels

Précautions individuelles, équipement de protection et procédures d'urgence:

Voir l'équipement de protection individuelle à la Section 8. Ne pas toucher les récipients endommagés ou le produit déversé à moins de porter les vêtements de protection appropriés. Maintenir à distance le personnel non autorisé. Assurer une ventilation adéquate.

Méthodes et matériel de confinement et de nettoyage:

Absorber le produit avec du sable ou un autre absorbant inerte. Arrêter le débit de matière, si ceci est sans risque.

Précautions pour la Protection de l'Environnement:

Éviter le rejet dans l'environnement. Ne pas contaminer les sources d'eau ou les égouts. Endiguer la fuite ou le déversement si cela peut être fait sans danger.

7 – Manipulation et stockage

Précautions à prendre pour une manipulation sans danger:

Les utilisateurs finaux devraient respecter les meilleures pratiques de l'industrie lors de la manipulation et l'utilisation de ce produit.

Les conseils peuvent être trouvés en utilisant la version actuelle de ASTM Standard E1497-05: Standard Practice for Selection and Safe Use of Water-Miscible and Straight Oil Metal Removal Fluids

Se conformer aux bonnes pratiques d'hygiène industrielle. Porter un équipement de protection personnelle approprié. N'exposez pas à la chaleur intense comme le produit peut développer et pressuriser le récipient.

Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités:

Durée de conservation: 720 jours Conserver dans le récipient d'origine hermétiquement fermé. Éviter tout contact avec des agents comburants. Conserver à l'écart des matières incompatibles.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

8 – Risques d'exposition et protection individuelle

Limites d'Exposition

Désignation chimique	Type	Valeurs Limites d'Exposition	Source
Mineral oil - Brouillard	PEL	5 mg/m ³	Les Etats-Unis. La Table d'OSHA z-1 les Limites pour les Polluants Aériens (29 CFR 1910.1000) (01 2017)
Mineral oil - Brouillard	TWA	5 mg/m ³	Les Etats-Unis. La Table d'OSHA z-1 les Limites pour les Polluants Aériens (29 CFR 1910.1000) (1989)
Paraffin oils - Fraction inhalable.	TWA	5 mg/m ³	États-Unis. ACGIH, valeurs limites d'exposition, dans leur version modifiée (03 2014)
Paraffin oils - Brouillard	PEL	5 mg/m ³	Les Etats-Unis. La Table d'OSHA z-1 les Limites pour les Polluants Aériens (29 CFR 1910.1000) (02 2006)
Paraffin oils - Brouillard	TWA	5 mg/m ³	Les Etats-Unis. La Table d'OSHA z-1 les Limites pour les Polluants Aériens (29 CFR 1910.1000) (1989)

Mesures de protection:

Utiliser l'équipement de protection individuel requis.

Protection respiratoire:

En cas de ventilation insuffisante, porter un appareil respiratoire approprié. Demander l'avis du superviseur sur les normes de protection respiratoire de la société.

Protection des Yeux:

Porter des lunettes de sécurité à écrans latéraux ou des lunettes étanches.

Protection de la peau et du corps:

Porter des vêtements de protection appropriés au risque d'exposition. Soyez conscient des autres dangers tels que les pièces en rotation. Contacter un professionnel de la santé et de la sécurité ou un fabricant pour obtenir des informations spécifiques. Porter des gants, des chaussures et des vêtements de protection résistant aux produits chimiques, et correspondant au risque d'exposition. Contacter un professionnel de l'hygiène et sécurité ou le fabricant pour tout détail.

Mesures d'hygiène:

Toujours adopter de bonnes pratiques d'hygiène personnelle, telles que lavage après manipulation de la substance et avant de manger, de boire ou de fumer. Laver régulièrement la tenue de travail pour éliminer les contaminants. Mettre au rebut les chaussures qui ne peuvent pas être lavées.

Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

9 – Caractéristiques physiques et chimiques

Aspect

État:	liquide
Forme:	Aucune information disponible.
Couleur:	Noir
Odeur:	Légère, Pétrole/solvant
Seuil de perception de l'odeur:	Aucune information disponible.
pH:	Aucune information disponible.
Point de fusion/point de congélation:	Aucune information disponible.
Température d'ébullition initiale et intervalle d'ébullition:	Aucune information disponible.
Point d'éclair:	196.11 °C (385.00 °F)
Taux d'évaporation:	Aucune information disponible.
Inflammabilité (solide, gaz):	Aucune information disponible.
Limites supérieures/inférieures d'inflammabilité ou d'explosivité	
Limites d'inflammabilité - supérieure (%):	Aucune information disponible.
Limites d'inflammabilité - inférieure (%):	Aucune information disponible.
Limites d'explosivité - supérieure:	Aucune information disponible.
Limites d'explosivité - inférieure:	Aucune information disponible.
Pression de vapeur:	Aucune information disponible.
Densité de vapeur:	Aucune information disponible.
Densité relative:	0.878
Solubilités	
Solubilité dans l'eau:	Insoluble
Solubilité (autre):	Aucune information disponible.
Coefficient de partition (n-octanol/eau):	Aucune information disponible.
Température d'auto-inflammation:	Aucune information disponible.
Température de décomposition:	Aucune information disponible.
Viscosité:	42.5 mm ² /s (40 °C, Mesurée)

AUTRES INFORMATIONS

VOC:	1.99 g/l (ASTM E 1868-10) 1.3 % (Method 24)



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

10 – Stabilité et réactivité

Réactivité:	Non réactif pendant l'utilisation normale.
Stabilité Chimique:	Ce produit est stable dans des conditions normales.
Possibilité de Réactions Dangereuses:	Aucun(e)(s) dans les conditions normales.
Conditions à Éviter:	Éviter tout chauffage ou contamination.
Matières Incompatibles:	Aucune information disponible.
Produits de Décomposition Dangereux:	La décomposition thermique ou la combustion peut libérer des oxydes de carbone et d'autres gaz ou vapeurs toxiques.

11 – Données toxicologiques

Informations sur les voies d'exposition probables

Ingestion:	Peut être ingéré par accident. L'ingestion peut provoquer irritation et maux de gorge.
Inhalation:	L'inhalation est la principale voie d'exposition. À concentration élevée, les vapeurs, émanations ou brouillards peuvent être irritants pour le nez, la gorge et les muqueuses.
Contact avec la Peau:	Le contact prolongé avec la peau peut entraîner des rougeurs et de l'irritation.
Contact oculaire:	Le contact oculaire est possible ; il doit être évité.

Symptômes liés aux caractéristiques physiques, chimiques et toxicologiques

Ingestion:	Aucune information disponible.
Inhalation:	Aucune information disponible.
Contact avec la Peau:	Aucune information disponible.
Contact oculaire:	Aucune information disponible.

Informations sur les effets toxicologiques

Toxicité aiguë (répertoirer toutes les voies d'exposition possibles)

Ingestion	
Produit:	ETAmél (): 2000 - 5000 mg/kg



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

Contact avec la peau

Produit: ETAmél (): 2000 - 5000 mg/kg

Inhalation

Produit: Non classé comme présentant une toxicité aiguë d'après les données disponibles.

Toxicité à dose répétée

Produit: Aucune information disponible.

Corrosion ou Irritation de la Peau

Produit: Aucune information disponible.

Blessure ou Irritation Grave des Yeux

Produit: Aucune information disponible.

Sensibilisation Respiratoire ou Cutanée

Produit: Aucune information disponible.

Cancérogénicité

Produit: Aucune information disponible.

Monographies du CIRC sur l'évaluation des risques de cancérogénicité pour l'homme:

Aucun composant cancérigène identifié

États-Unis. Rapport du NTP (National Toxicology Program) sur les cancérogènes :

Aucun composant cancérigène identifié

ÉTATS-UNIS. Substances spécialement réglementées par l'OSHA (29 CFR 1910.1001-1050), dans sa version modifiée:

Aucun composant cancérigène identifié

Mutagénicité des Cellules Germinales

In vitro

Produit: Aucune information disponible.

In vivo

Produit: Aucune information disponible.

Toxicité pour la reproduction

Produit: Aucune information disponible.

Toxicité Spécifique au Niveau de l'Organe Cible- Exposition Unique

Produit: Aucune information disponible.

Toxicité Spécifique au Niveau de l'Organe Cible- Expositions répétées

Produit: Aucune information disponible.

Risque d'Aspiration

Produit: Aucune information disponible.

Autres effets:

Aucune information disponible.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

12 – Données écologiques

Informations générales:

Ce produit n'a pas été évalué pour la toxicité écologique ou d'autres effets de l'environnement.

13 – Recyclage

Instructions pour l'élimination:

Le rejet, le traitement et l'élimination peuvent être soumis à des lois nationales, régionales ou locales. Éliminer les déchets dans une installation de traitement et d'élimination des déchets appropriée conformément aux lois et aux réglementations en vigueur et en fonction des caractéristiques du produit au moment de l'élimination. C'est la responsabilité de l'utilisateur de produit ou du propriétaire pour déterminer au moment de la disposition, qui se perdent les règlements doivent être appliqués.

Emballages Contaminés:

Les conteneurs vides doivent être acheminés vers un site agréé pour le traitement des déchets à des fins de recyclage ou d'élimination.

14 – Transport

Ministère des transports des États-Unis (Department of Transportation, DOT)

Non réglementé.

IMDG

Non réglementé.

IATA

Non réglementé.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

15 – Réglementation

Réglementations Fédérales des Etats-Unis

ÉTATS-UNIS. Substances spécialement réglementées par l'OSHA (29 CFR 1910.1001-1050), dans sa version modifiée

Aucun présent ou aucun présent dans des quantités réglementées.

Superfund Amendments and Reauthorization Act de 1986 (SARA)

Catégories de danger

Non classé comme dangereux selon le SGH

SARA 313 (Déclaration au TRI)

Aucun présent ou aucun présent dans des quantités réglementées.

États-Unis - Réglementation des États

États-Unis - Proposition 65 de la Californie

Aucun composant réglementé par la Proposition 65 de la Californie n'est présent.



Produit: RIDGID Dark Thread Cutting Oil (Etats-Unis)

16 – Renseignements divers

Rédaction Ridge Tool Company

Norme De Fonctionnement 6-103

Révision J

EC 45297

Date de publication..... 19 octobre 2020

Dernière révision le 2 mai 2018

Quoi que la société Ridge Tool estime que les affirmations, informations techniques et recommandations ci-présentes sont dignes de confiance, celles-ci ne sont données qu'à titre indicatif, sans aucune garantie expresse ou implicite, et ne sauraient engager la responsabilité civile de la société en cas de pertes, dommages et intérêts, voire frais directs ou indirects relevant de leur application.



HOJA DE DATOS DE SEGURIDAD

Sección 1 – Identificación del producto y la compañía

Nombre del producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

No. de catálogo: 11471, 11491, 41590, 41600, 41610, 70830

Uso recomendado: Para cortar roscas

Restricciones de utilización: Uso industria seulement

Nombre de la compañía:

North America
Ridge Tool Company
400 Clark Street
Elyria, Ohio 44035-6001, EE. UU.
Teléfono 1-800-519-3456 (EE. UU.) (8:00 a 17:00 hora estándar del este, lunes a viernes)
Teléfono de emergencia: Llame al 9-1-1 o al teléfono de emergencia local
www.RIDGID.com

Estándar De Funcionamiento: 6-103

Révision: J

EC: 45297

Fecha de publicación: 19 de octubre de 2020

Fecha de la última revisión: 2 de mayo de 2018



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 2 – Identificación de peligros

Clasificación de Peligro

No clasificado como peligroso bajo GHS

Elementos de la Etiqueta

Símbolo de Peligro: No hay símbolo

Palabra de Advertencia: No hay palabra de advertencia.

Indicación de Peligro: No aplicable

Consejos de Prudencia No aplicable

Otros peligros que no dan lugar a clasificación SGA: Ninguno.

Sección 3 – Composición e información sobre ingredientes

Información general: Este producto no contiene silicona o aditivos clorados.

Componente(s) peligroso(s):

Determinación química	No. CAS	Concentración
Mineral oil	Confidencial	20 - <50%
Paraffin oils	Confidencial	20 - <50%

Las identidades químicas específicas y/o los porcentajes exactos han sido retenidos como secretos de fabricación.

Sección 4 – Primeros auxilios

Ingestión: Enjuagar a fondo la boca. Llamar a un CENTRO DE TOXICOLOGÍA / médico si la persona se encuentra mal. NO provocar el vómito.

Inhalación: Trasladar al aire libre. Llamar a un CENTRO DE TOXICOLOGÍA / médico si la persona se encuentra mal.

Contacto con la Piel: Quitar ropa y zapatos contaminados. Lave las áreas de contacto con agua y jabón. En caso de irritación cutánea: Consultar a un médico.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Contacto con los ojos: Lave con abundante agua. Si aparece irritación, busque asistencia médica. Continuar enjuagando durante al menos 15 minutos.

Los síntomas y efectos más importantes, tanto los agudos como los retardados

Síntomas: No hay datos disponibles.

Indicación de asistencia médica inmediata y tratamiento especial necesario

Tratamiento: Obtenga atención médica en caso de síntomas.

Sección 5 – Medidas contra incendios

Riesgos Generales de Incendio: Ningún riesgo excepcional de incendio o explosión señalado.

Medios de extinción adecuados (y no adecuados)

Medios de extinción apropiados: Agua pulverizada, neblina, CO₂, polvos químicos, o espuma normal. Seleccione el medio de extinción más apropiado, teniendo en cuenta la posible presencia de otros productos químicos.

Medios de extinción no apropiados: No utilice chorro de agua, pues extendería el fuego.

Peligros específicos derivados de la sustancia química: El calor puede ocasionar explosión de los recipientes. En caso de incendio se pueden formar gases nocivos.

Equipo especial de protección y medias de precaución para los bomberos

Medidas especiales de lucha contra incendios: No hay datos disponibles.

Equipos de protección especial que debe llevar el personal de lucha contra incendios: Los bomberos deben utilizar un equipo de protección estándar incluyendo chaqueta ignífuga, casco con careta, guantes, botas de goma, y, en espacios cerrados, equipo de respiración autónomo (SCBA, según sus siglas en inglés).



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 6 – Medidas en caso de liberación accidental

Precauciones personales, equipo de protección y procedimientos de emergencia:

Consulte la sección 8 de la FDS sobre equipo de protección personal. No toque los recipientes dañados o el material derramado a menos que esté usando ropa protectora adecuada. Mantener alejado al personal no autorizado. Asegúrese una ventilación apropiada.

Métodos y material de contención y de limpieza:

Absorber con arena u otro absorbente inerte. Detenga el flujo del material, si esto no representa un riesgo.

Precauciones Relativas al Medio Ambiente:

Evitar su liberación al medio ambiente. No contamine el drenaje o el alcantarillado. Impedir nuevos escapes o derrames de forma segura.

Sección 7 – Manipulación y almacenamiento

Precauciones para una manipulación segura:

Los usuarios finales deben seguir las mejores prácticas de la industria para el manejo y uso de este producto.

La dirección puede ser encontrada usando la versión corriente de ASTM Standard E1497-05: Standard Practice for Selection and Safe Use of Water-Miscible and Straight Oil Metal Removal Fluids

Respete las normas para una manipulación correcta de productos químicos. Use equipo protector personal adecuado. No exponga al calor intenso cuando el producto puede ampliar y presurizar el contenedor.

Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades:

Vida útil: 720 días Guárdese en el recipiente original bien cerrado. Evite el contacto con agentes reductores. Consérvese alejado de materiales incompatibles.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 8 – Controles contra la exposición: protección personal

Valores Límite

Determinación química	Tipo	Valores Límite de Exposición	Fuente
Mineral oil - Niebla	PEL	5 mg/m3	NOS. OSHA la tabla Z-1 límites para contaminantes del aire (29 CFR 1910.1000) (01 2017)
Mineral oil - Niebla	TWA	5 mg/m3	NOS. OSHA la Tabla Z-1-A (29 CFR 1910.1000) (1989)
Paraffin oils - Fracción inhalable	TWA	5 mg/m3	US. Valores límite de umbral de la ACGIH, en su forma enmendada (03 2014)
Paraffin oils - Niebla	PEL	5 mg/m3	NOS. OSHA la tabla Z-1 límites para contaminantes del aire (29 CFR 1910.1000) (02 2006)
Paraffin oils - Niebla	TWA	5 mg/m3	NOS. OSHA la Tabla Z-1-A (29 CFR 1910.1000) (1989)

Medidas de protección:

Utilizar los equipos de protección individual según las necesidades.

Protección respiratoria:

En caso de ventilación insuficiente, utilice un equipo respiratorio adecuado. Consulte al supervisor sobre la norma de la compañía de protección respiratoria.

Protección de los Ojos:

Use gafas de seguridad con protectores laterales (o gafas estancas).

Protección de la Piel y del Cuerpo:

Use ropa protectora apropiada para el riesgo de exposición. Tenga en cuenta otros peligros, como las piezas giratorias. Comuníquese con el profesional o fabricante de salud y seguridad para obtener información específica. Lleve guantes resistentes a los productos químicos, zapatos y traje protectores adecuados para el riesgo de exposición. Contacte con un especialista en salud y seguridad profesional o con el fabricante para obtener información específica.

Medidas de higiene:

Seguir siempre buenas medidas de higiene personal, como lavarse después de manipular el material y antes de comer, beber y/o fumar. Lave rutinariamente la ropa de trabajo para eliminar los contaminantes. Deseche el calzado contaminado que no se pueda limpiar.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 9 – Propiedades físicas y químicas

Aspecto

Forma/estado:	líquido
Forma/Figura:	No hay datos disponibles.
Color:	Negro
Olor:	Ligero, petróleo/solvente
Umbral de olor:	No hay datos disponibles.
pH:	No hay datos disponibles.
Punto de fusión / Punto de congelación:	No hay datos disponibles.
Punto inicial de ebullición e intervalo de ebullición:	No hay datos disponibles.
Punto de inflamación:	196.11 °C (385.00 °F)
Tasa de evaporación:	No hay datos disponibles.
Inflamabilidad (sólido, gas):	No hay datos disponibles.
Límites superior/inferior de inflamabilidad o de explosividad	
Límite superior de inflamabilidad (LSI) (%):	No hay datos disponibles.
Límite inferior de inflamabilidad (LII) (%):	No hay datos disponibles.
Límite superior de explosividad:	No hay datos disponibles.
Límite inferior de explosividad:	No hay datos disponibles.
Presión de vapor:	No hay datos disponibles.
Densidad del vapor:	No hay datos disponibles.
Densidad relativa:	0.878
Solubilidad(es)	
Solubilidad en agua:	Insoluble
Solubilidad (otra):	No hay datos disponibles.
Coefficiente de reparto (n-octanol/agua):	No hay datos disponibles.
Temperatura de autoignición:	No hay datos disponibles.
Temperatura de descomposición:	No hay datos disponibles.
Viscosidad:	42.5 mm ² /s (40 °C, medido)
OTRA INFORMACIÓN	
VOC:	1.99 g/l (ASTM E 1868-10) 1.3 % (Method 24)



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 10 – Estabilidad y reactividad

Reactividad:	No reactivo durante uso normal.
Estabilidad Química:	El material es estable bajo condiciones normales.
Posibilidad de Reacciones Peligrosas:	Ningunos en circunstancias normales.
Condiciones que Deben Evitarse:	Evite el calor o la contaminación.
Materiales Incompatibles:	No hay datos disponibles.
Productos de Descomposición Peligrosos:	La descomposición térmica o la combustión pueden liberar óxido de carbono u otros gases o vapores tóxicos.

Sección 11 – Información toxicológica

Información sobre posibles vías de exposición

Ingestión:	Puede ingerirse accidentalmente. La ingestión puede causar irritación y malestar.
Inhalación:	La inhalación es la principal vía de exposición. En concentraciones altas, los vapores, humos o neblinas pueden irritar la nariz, la garganta y las membranas mucosas.
Contacto con la Piel:	El contacto prolongado con la piel puede causar rubor e irritación.
Contacto con los ojos:	El contacto con los ojos es posible y debe evitarse.

Síntomas relacionados a las características físicas, químicas y toxicológicas

Ingestión:	No hay datos disponibles.
Inhalación:	No hay datos disponibles.
Contacto con la Piel:	No hay datos disponibles.
Contacto con los ojos:	No hay datos disponibles.

Información sobre los efectos toxicológicos

Toxicidad aguda (listar todas las vías de exposición posibles)

Ingestión	
Producto:	ETAmézcla (): 2000 - 5000 mg/kg



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Contacto dermal

Producto: ETAmexcla (): 2000 - 5000 mg/kg

Inhalación

Producto: No clasificado en cuanto a toxicidad aguda con los datos disponibles.

Toxicidad por dosis repetidas

Producto: No hay datos disponibles.

Corrosión/Irritación Cutáneas

Producto: No hay datos disponibles.

Lesiones Oculares Graves/Irritación Ocular

Producto: No hay datos disponibles.

Sensibilización de la Piel o Respiratoria

Producto: No hay datos disponibles.

Carcinogenicidad

Producto: No hay datos disponibles.

Monografías de IARC sobre la evaluación de los riesgos carcinogénicos para los humanos:

No se identificaron componentes carcinogénicos

Programa Nacional de Toxicología de EUA (NTP). Reporte sobre carcinógenos:

No se identificaron componentes carcinogénicos

EEUU. Sustancias específicamente reguladas por la OSHA (29 CFR 1910.1001-1050), en su forma enmendada:

No se identificaron componentes carcinogénicos

Mutagenicidad en Células Germinales

En vitro

Producto: No hay datos disponibles.

En vivo

Producto: No hay datos disponibles.

Toxicidad para la reproducción

Producto: No hay datos disponibles.

Toxicidad Sistémica Específica de Órganos Diana- Exposición Única

Producto: No hay datos disponibles.

Toxicidad Sistémica Específica de Órganos Diana- Exposiciones Repetidas

Producto: No hay datos disponibles.

Peligro por Aspiración

Producto: No hay datos disponibles.

Otros síntomas: No hay datos disponibles.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 12 –Información ecológica

Información general:

Este producto no ha sido evaluado para la toxicidad ecológica u otros efectos ambientales.

Sección 13 – Consideraciones relativas a la eliminación

Instrucciones para la eliminación:

Las actividades de descarga, tratamiento o eliminación pueden estar sujetos a leyes nacionales, estatales o locales. Elimine el residuo en una instalación adecuada de tratamiento y eliminación de acuerdo con las leyes y reglamentos correspondientes y características del producto en el momento de la eliminación. Es responsabilidad del usuario del producto o propietario para determinar en el momento de la disposición, que las regulaciones de residuos debe ser aplicado.

Envases Contaminados:

Los contenedores vacíos deben ser llevados a un sitio de manejo aprobado para desechos, para el reciclado o eliminación.

Sección 14 – Información de transporte

DOT

No reglamentado.

IMDG

No reglamentado.

IATA

No reglamentado.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 15 – Información sobre reglamentos

Reglamentos Federales de EE.UU.

EEUU. Sustancias específicamente reguladas por la OSHA (29 CFR 1910.1001-1050), en su forma enmendada

No están presentes, o no están presentes en las cantidades reguladas.

Ley de Enmiendas y Reautorización del Superfondo de 1986 (SARA)

Categorías de peligro

No clasificado como peligroso bajo GHS

SARA 313 (Reporte TRI, Acerca del Inventario de Liberación de Sustancias Tóxicas)

No están presentes, o no están presentes en las cantidades reguladas.

Regulaciones de un Estado de EUA

Proposición 65 del Estado de California, EUA

No hay presencia de ningún ingrediente regulado por CA Prop 65.



Producto: RIDGID Dark Thread Cutting Oil (Estados Unidos)

Sección 16 – Información adicional

Preparado por Ridge Tool Company

Estándar De Funcionamiento. 6-103

Revision J

EC 45297

Fecha de emisión 19 de octubre de 2020

Fecha de la última revisión..... 2 de mayo de 2018

RIDGE TOOL CONSIDERA QUE TODAS LAS DECLARACIONES, INFORMACIÓN TÉCNICA Y RECOMENDACIONES EN EL PRESENTE DOCUMENTO SON CONFIABLES, PERO SE PRESENTAN SIN GARANTÍA ALGUNA, SEA EXPRESA O IMPLÍCITA, Y NO ASUMIMOS RESPONSABILIDAD ALGUNA POR PÉRDIDAS, DAÑOS O GASTOS, DIRECTOS O CONSECUENTES, QUE SURJAN DE SU USO.



SAFETY DATA SHEET

RotaMagic™ Super Concentrated Cutting Fluid

Section 1

Product and Company Identification

Company

Hougen Manufacturing, Inc.
3001 Hougen Dr
Swartz Creek, MI 48473
United States of America
Phone: (810) 635-7111

Emergency Phone Numbers

(810) 635-7111 Normal Business Hrs
USA & Canada Chemtrec 800-424-9300
International Chemtrec 703-527-3887

Recommended Usage: Water Based Lubricant

Other Identifier: Concentrate

Product Name: RotaMagic

Section 2

Hazards Identification

Classification of the Mixture: Clear Blue liquid. Amine like odor.

Most Important Hazards: Causes skin and eye irritation.

Hazard Classification:

Causes eye irritation – Category 2B

Causes mild skin irritation – Category 2

Signal Word: Warning

Pictograms:

**Precautionary Statements:**

Inhalation - Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.

Skin – Wash thoroughly after handling. If skin irritation occurs, get medical attention.

Eyes - Avoid contact with eyes. If in eyes, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing and wash hands after handling.

Ingestion – Harmful if swallowed do not induce vomiting.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with provisions of GHS.

Quantity of Ingredients with Unknown Acute Toxicity: <1.0%

Section 3

Composition Information on Ingredients

Ingredient**WT %****CAS #**

Triethanolamine

15-25

102-71-6



SAFETY DATA SHEET

RotaMagic™ Super Concentrated Cutting Fluid

Section 4 First Aid Measures

Eyes: Flush eyes with running water for at least 15 minutes. If redness, burning, blurred vision or irritation persists, transport to nearest medical facility for additional treatment.

Skin: Flush skin with water, wash with soap and water. If irritation occurs, get medical attention. Remove contaminated clothing. Do not reuse clothing until cleaned. If material is injected under the skin, transport to the nearest medical facility for additional treatment. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Ingestion: Do NOT induce vomiting and obtain medical attention. Have victim rinse mouth out with water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

Section 5 Fire Fighting Measures

Flammable Properties:

Flash point Neat: N/A (ASTM D-56)

Flammable limits in air: N/A

Auto ignition temperature: N/A

Extinguishing media: CO₂, dry chemical, foam

Special firefighting measure:

The material as received will not support combustion, however its residues may; therefore, procedures for an oil fire should be followed. Use self-contained breathing apparatus. Use foam or dry chemical to extinguish fire. Water may be used only to keep surrounding containers cool. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Section 6 Accidental Release Measures

- Eliminate ignition sources and ventilate area.
- Absorb spillage with inert absorbent material.
- Contain spill and keep from entering waterways or sewers.
- Advise EPA/state agency if required.
- Use proper personal protective equipment for clean-up.
- Treat contaminated absorbent same as spilled product.

Section 7 Handling and Storage

Handling and Storage Precautions: Avoid heat, open flames, including pilot lights, and strong oxidizing agents. Use explosion-proof ventilation to prevent vapor accumulation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.

Work/Hygienic Practices: Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles such as shoes or belts that cannot be decontaminated. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.



SAFETY DATA SHEET

RotaMagic™ Super Concentrated Cutting Fluid

Section 8 Personal Protection/ Exposure Controls

Engineering Controls: Use adequate ventilation to keep vapors and mists of this material below applicable standards. Recommended work place control parameters - based on triethanolamine ACGIH TWA 5 mg/m³.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Skin Protection: Use protective clothing that is chemically resistant to this product. Acceptable materials for gloves and aprons are: neoprene, nitrile rubber or viton.

Eye Protection: Use safety glasses or goggles. Have suitable eye wash water available.

Other/General Protection: For mists and vapors: Air Purifying, organic vapor cartridge, NIOSH approved respirator. Use self-contained breathing apparatus for environments with unknown concentrations or emergency situations.

<u>Chemical Name</u>	<u>OSHA TWA (mg/m³)</u>	<u>ACGIH TWA (mg/m³)</u>
Triethanolamine		5

Section 9 Physical and Chemical Properties

Color: Clear Blue	Vapor Pressure: N/A	Solubility in Water: Complete
Appearance: Clear Liquid	% Volatile by Volume: >30% as water	Evaporation Rate
Odor: Characteristic	Vapor Density (air = 1): >1	(Butyl Acetate = 1): 1
Boiling Point: >212° F	Reactivity in Water: Non-reactive	Specific Gravity: 1.003
pH @ 10:1 8.6	Viscosity: N/A	

Section 10 Stability and Reactivity

Stability: Stable

Conditions to avoid: Sources of ignition.

Incompatibility: Strong oxidizing or reducing agents.

Decomposition Products: Oxides of Carbon, Nitrogen and Phosphorus.

Hazardous Polymerization: Will not occur.

Section 11 Toxicological Information

Likely Routes of Exposure: Inhalation, skin, eyes and ingestion.

Potential Health Effects:

Eye Effects: This mixture can cause irritation, redness to the eyes.

Skin Effects: Prolonged and/or repeated skin contact may cause irritation/dermatitis.

Oral Effects: Harmful if swallowed. May cause burns to mouth and esophagus. Gastrointestinal tract irritation, nausea and vomiting.

Inhalation Effects: Harmful if inhaled. May cause respiratory tract irritation.

Chronic Health Effects: Primary target organs following repeated exposure are eyes, skin, lungs, liver and kidneys.

Mutagenicity: Negative

Carcinogenicity: This mixture does not contain any component that is listed as a carcinogenic or a potential carcinogen by the National Toxicology Program, by the I.A.R.C. monographs or by OSHA.

Teratogenicity: Negative.

Sensitization: Negative.

Toxicological Data: No data available or estimated



SAFETY DATA SHEET

RotaMagic™ Super Concentrated Cutting Fluid

Section 12 Ecological Information

Not classified due to inadequate data available on this mixture. Recommend avoidance of release to the environment.

Section 13 Disposal Considerations

Avoid release to the environment. Dispose in a safe manner in accordance with national, state and local regulations. Not a RCRA hazardous waste if uncontaminated. If "used" RCRA criteria must be determined. Dispose of container by recycling or if permitted incineration.

Section 14 Transportation Information

Proper Shipping Name: Detergents, Soaps.

Shipping Class: 55

Dot Identification Number: N/A

Dot Shipping Label: Not regulated by DOT.

TDG Classification: Not controlled under TDG (Canada).

Section 15 Regulatory Information

U.S. Federal Regulatory Information:

SARA 302 Threshold Planning Quantity: N/A

SARA 304 Reportable Quantity: N/A

SARA 311 Categories:

Acute Health Effects:	Yes
Chronic Health Effects:	None
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

TSCA Inventory: The components of this product are listed on the TSCA inventory of chemicals.

EPA Hazard Classification Code: Not applicable

CERCLA: No chemicals in this product are subject to the reporting requirements of CERCLA.

SARA Title III - Section 313 Supplier Notification: No Chemicals in this product exceed the DE Minimus reporting level established by SARA Title III, Section 313 and 40 CFR 372.

WHMIS Classification: WHMIS controlled. Class D; Division 2, Subdivision B: otherwise causing toxic effects.

Other Regulations: All components of this formulation are listed on the CEPA-DSL (Domestic Substance List)

Section 16 Other Information

NFPA Hazard Rating Neat:

Health:	1	Slight
Flammability:	0	Negligible
Reactivity:	0	Negligible

SDS Date Prepared: 06/03/2024

SDS Revision Date: 06/12/2024

*Threshold Limit Value/Personal Exposure Limit

N/A = Not Applicable

N/E = Not Established

Disclaimer of Express or Implied Warranties

The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy of completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

1/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name	ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE
Product code (UVP)	87344886
SDS Number	102000056714
EPA Registration No.	71995-64

Relevant identified uses of the substance or mixture and uses advised against

Use	Herbicide
Restrictions on use	See product label for restrictions.
Information on supplier	
Supplier	Monsanto Company Lawn & Garden Products A Division of Bayer CropScience LP 800 North Lindbergh Blvd. St. Louis, MO 63167 USA
Responsible Department	Email: SDSINFO.BCS-NA@bayer.com
Emergency telephone no.	
Emergency Telephone Number (24hr/ 7 days)	1-800-334-7577
Product Information Telephone Number	1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Acute toxicity(Inhalation): Category 4

Specific target organ toxicity - repeated exposure, Reproductive toxicity: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

2/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

Harmful if inhaled.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Use only outdoors or in a well-ventilated area.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe gas/ mist/ vapours/ spray.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
IF exposed or concerned: Get medical advice/ attention.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Triclopyr, triethylamine salt	57213-69-1	2.50
fluazifop-P-butyl (ISO)	79241-46-6	2.00
Diquat dibromide	85-00-7	1.50

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

Version 2.0 / USA
102000056714

3/11
Revision Date: 12/10/2021
Print Date: 05/24/2022

Ingestion Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms To date no symptoms are known.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow water to come into direct contact with the product.

Flash point >100 °C / 212 °F
does not flash

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Explosivity No data available

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

4/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing. Keep away from direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Diquat dibromide	85-00-7	0.5 mg/m3	2005	NIOSH

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

5/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

		(REL)		
Diquat dibromide (Total dust.)	85-00-7	0.5 mg/m3 (TWA PEL)	09 2006	US CA OEL
Diquat dibromide	85-00-7	0.5 mg/m3 (TWA)	06 2008	TN OEL
Diquat dibromide (Inhalable fraction.)	85-00-7	0.5 mg/m3 (TWA)	03 2014	ACGIH
Diquat dibromide (Respirable fraction.)	85-00-7	0.1 mg/m3 (TWA)	03 2014	ACGIH

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

Eye protection

Safety glasses with side-shields

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	Liquid
Colour	brown
Odor	paint-like
pH	6.6 - 6.9 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	> 100 °C / 212 °F does not flash

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

6/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

Flammability	No data available
Auto-ignition temperature	No data available
Minimum ignition energy	No data available
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Vapor Pressure	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Relative density	No data available
Density	1.04 g/cm ³ (20 °C)
Water solubility	No data available
Partition coefficient: n-octanol/water	Diquat dibromide: log Pow: -4.6 Triclopyr: log Pow: -0.45
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Explosivity	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

Version 2.0 / USA
102000056714

7/11
Revision Date: 12/10/2021
Print Date: 05/24/2022

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Inhalation
Immediate Effects	
Eye	May cause eye irritation.
Skin	May cause skin irritation.
Ingestion	Not expected to produce significant adverse effects when recommended use instructions are followed.
Inhalation	Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg
Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (Rat) > 2.04 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
highest concentration tested
Test conducted with a similar formulation.

Acute dermal toxicity
Dermal toxicity was assessed based on the result of the oral toxicity study.
Dermal toxicity study has been waived by competent regulatory authority.

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)
Test conducted with a similar formulation.

Serious eye damage/eye irritation Minimally irritating. (Rabbit)
Test conducted with a similar formulation.

Respiratory or skin sensitisation Skin: Non-sensitizing. (Guinea pig)
Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity – single exposure

Diquat dibromide: May cause respiratory irritation.
Triclopyr: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Diquat dibromide caused specific target organ toxicity in experimental animal studies in the following organ(s): Eyes, Kidney. Diquat dibromide caused Cataract in animal studies.
Triclopyr caused specific target organ toxicity in experimental animal studies in the following organ(s): Kidney, Liver, Gastrointestinal tract.

Assessment mutagenicity

Diquat dibromide was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Triclopyr was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Diquat dibromide was not carcinogenic in lifetime feeding studies in rats and mice.
Triclopyr was not carcinogenic in lifetime feeding studies in rats and mice.

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

Version 2.0 / USA
102000056714

8/11
Revision Date: 12/10/2021
Print Date: 05/24/2022

ACGIH

Diquat dibromide 85-00-7 Group A4

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Diquat dibromide did not cause reproductive toxicity in a two-generation study in rats.
Triclopyr did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Diquat dibromide caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Diquat dibromide are related to maternal toxicity.
Triclopyr caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Triclopyr are related to maternal toxicity.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 117 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triclopyr.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 6.02 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient fluazifop-P-butyl.

EC50 (Daphnia magna (Water flea)) 132.9 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient triclopyr.

Toxicity to aquatic plants

EC50 (Raphidocelis subcapitata (freshwater green alga)) > 1.8 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient fluazifop-P-butyl.
EC50 (Raphidocelis subcapitata (freshwater green alga)) 32.5 mg/l
static test; Exposure time: 5 d
The value mentioned relates to the active ingredient triclopyr.

Biodegradability

Diquat dibromide:

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

9/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

	Not rapidly biodegradable Triclopyr: Not rapidly biodegradable
Koc	Diquat dibromide: Koc: 2184750 Triclopyr: Koc: 0 - 50
Bioaccumulation	Diquat dibromide: Bioconcentration factor (BCF) 1 Does not bioaccumulate. Triclopyr: Bioconcentration factor (BCF) 1 Does not bioaccumulate.
Mobility in soil	Diquat dibromide: Immobile in soil Triclopyr: Highly mobile in soils
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Diquat dibromide: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB). Triclopyr: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Environmental precautions	Apply this product as specified on the label. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Retain and dispose of contaminated wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

10/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 71995-64

US Federal Regulations

TSCA list

Water	7732-18-5
Castor oil, ethoxylated	61791-12-6
Polyethylene glycol	25322-68-3

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Yes

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Polyethylene glycol	25322-68-3	MN
Triclopyr, triethylamine salt	57213-69-1	NJ
Diquat dibromide	85-00-7	CA, CT, IL, NJ, RI

Environmental

CERCLA

Yes

Diquat dibromide	85-00-7

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Diquat dibromide	85-00-7

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

SAFETY DATA SHEET



ROUNDUP® WEED & GRASS KILLER4 CONCENTRATE

11/11

Version 2.0 / USA
102000056714

Revision Date: 12/10/2021
Print Date: 05/24/2022

Signal word: Caution!

Hazard statements: May cause eye irritation.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 0 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 0 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 15: Regulatory information.

Revision Date: 12/10/2021

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.



S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 6/7/2023 Revision date: 6/7/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : S-515 Clear Thin Spread Floor Tile Adhesive
Product code : 70010433
Synonyms : S-515

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Adhesives, binding agents
Restrictions on use : None known

1.3. Supplier

AHF Products
3840 Hempland Road
Mountville, PA, 17554
T (717) 251-1073

1.4. Emergency telephone number

Emergency number : CHEM-TEL 1-800-255-3924 OR 1-813-248-9585 (call collect)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Not determined.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not handle until all safety precautions have been read and understood.

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

S-515 Clear Thin Spread Floor Tile Adhesive

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Paste.
Colour : Tan
Odour : Slight
Odour threshold : No data available
pH : 8.5 – 9.5

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 93.3 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: 1.045
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 25000 mm²/s
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : 0 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.
Skin corrosion/irritation	: Not classified. pH: 8.5 – 9.5
Serious eye damage/irritation	: Not classified. pH: 8.5 – 9.5

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: 25000 mm ² /s
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not applicable

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

S-515 Clear Thin Spread Floor Tile Adhesive

SARA Section 311/312 Hazard Classes	None

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Ethyl acrylate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date : 06/07/2023

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Safety Data Sheet (SDS), USA - HSI

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable



S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 6/7/2023 Revision date: 6/7/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : S-515 Clear Thin Spread Floor Tile Adhesive
Product code : 70010433
Synonyms : S-515

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Adhesives, binding agents
Restrictions on use : None known

1.3. Supplier

AHF Products
3840 Hempland Road
Mountville, PA, 17554
T (717) 251-1073

1.4. Emergency telephone number

Emergency number : CHEM-TEL 1-800-255-3924 OR 1-813-248-9585 (call collect)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Not determined.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not handle until all safety precautions have been read and understood.

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

S-515 Clear Thin Spread Floor Tile Adhesive

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Paste.
Colour : Tan
Odour : Slight
Odour threshold : No data available
pH : 8.5 – 9.5

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 93.3 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: 1.045
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 25000 mm²/s
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : 0 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.
Skin corrosion/irritation	: Not classified. pH: 8.5 – 9.5
Serious eye damage/irritation	: Not classified. pH: 8.5 – 9.5

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

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Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: 25000 mm²/s
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not applicable

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

S-515 Clear Thin Spread Floor Tile Adhesive

SARA Section 311/312 Hazard Classes	None

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Ethyl acrylate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 06/07/2023

S-515 Clear Thin Spread Floor Tile Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Safety Data Sheet (SDS), USA - HSI

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SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS
2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous
Products Regulation (HPR)

Revision Date 05-Mar-2025

Version 1

1. Identification

Product identifier

Product Name SA9 BATTERY PROTECTOR & SEALER 5 OZ AE

Other means of identification

Product Code 80370

UN number or ID number 1950

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Battery Sealant

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:

ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

Company Phone Number 866-732-9502

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Aerosols	Category 1
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3

Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Contains ACETONE; PETROLATUM; CUMENE; ETHYL BENZENE



Danger

Hazard statements

Extremely flammable aerosol.
Pressurized container: May burst if heated.
Causes skin irritation.
Causes serious eye irritation.
May cause cancer.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements - Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Wash face, hands and any exposed skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Do not breathe dust.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Pressurized container: Do not pierce or burn, even after use.
Do not spray on an open flame or other ignition source.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice and attention.

Skin

IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice and attention.
Take off contaminated clothing and wash before reuse.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements - Storage

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Protect from sunlight.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

25 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
31 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
55 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
80 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
37 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information

May be harmful in contact with skin. May be harmful if inhaled. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
PROPANE	74-98-6	10-30%	-	-
ACETONE	67-64-1	10-30%	-	-
PETROLATUM	8009-03-8	10-30%	-	-
XYLENE	1330-20-7	10-30%	-	-
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-47-8	3-7%	-	-
ETHYL BENZENE	100-41-4	1-5%	-	-
CUMENE	98-82-8	0.1-1%	-	-

4. First-aid measures**Description of first aid measures****General advice**

IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed**Symptoms**

May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Small Fire In case of fire, use water spray, foam, dry chemical, or CO2.

Large Fire In case of fire, use water spray, foam, dry chemical, or CO2.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling**Advice on safe handling**

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

8. Exposure controls/personal protection**Control Parameters****Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
PROPANE 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard Simple asphyxiant	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
ACETONE 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors. (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³
XYLENE 1330-20-7	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	-
ETHYL BENZENE 100-41-4	TWA: 20 ppm Ototoxicant - potential to cause hearing disorders	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
CUMENE 98-82-8	TWA: 5 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) Sk* Sk*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³

Chemical name	Alberta	British Columbia	Ontario	Quebec
PROPANE 74-98-6	TWA: 1000 ppm	Simple asphyxiant	TWA: Simple asphyxiant (See Appendix F: Minimal Oxygen Content; explosion hazard)	Simple asphyxiant
ACETONE 67-64-1	TWA: 500 ppm TWA: 1200 mg/m ³ STEL: 750 ppm STEL: 1800 mg/m ³	TWA: 250 ppm STEL: 500 ppm	TWA: 250 ppm STEL: 500 ppm	TWA: 500 ppm TWA: 1190 mg/m ³ STEL: 1000 ppm STEL: 2380 mg/m ³
XYLENE 1330-20-7	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 150 ppm STEL: 651 mg/m ³
ETHYL BENZENE 100-41-4	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm
CUMENE 98-82-8	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm	TWA: 5 ppm

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
PROPANE	TWA: Simple asphyxiant (See Appendix F: Minimal Oxygen Content)	TWA:	TWA:	TWA: Simple asphyxiant
ACETONE	TWA: 250 ppm STEL: 500 ppm	TWA: 250 ppm STEL: 500 ppm	TWA: 250 ppm STEL: 500 ppm	TWA: 250 ppm STEL: 500 ppm
XYLENE	TWA: 20 ppm	TWA: 100 ppm STEL: 150 ppm	TWA: 20 ppm	TWA: 20 ppm
ETHYL BENZENE	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm
CUMENE	TWA: 5 ppm	TWA: 50 ppm	TWA: 5 ppm	TWA: 5 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
PROPANE	TWA: 1000 ppm STEL: 1250 ppm	TWA:	TWA: 1000 ppm STEL: 1250 ppm	Simple asphyxiant
ACETONE	TWA: 500 ppm STEL: 750 ppm	TWA: 250 ppm STEL: 500 ppm	TWA: 500 ppm STEL: 750 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ STEL: 1250 ppm STEL: 3000 mg/m ³
XYLENE	TWA: 100 ppm STEL: 150 ppm	TWA: 20 ppm	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 650 mg/m ³ Sk*
ETHYL BENZENE	TWA: 100 ppm STEL: 125 ppm Designated substance	TWA: 20 ppm	TWA: 100 ppm STEL: 125 ppm Designated Chemical Substance	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³
CUMENE	TWA: 50 ppm STEL: 74 ppm	TWA: 5 ppm	TWA: 50 ppm STEL: 74 ppm	TWA: 50 ppm TWA: 245 mg/m ³ STEL: 75 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
				STEL: 365 mg/m ³ Sk*

Biological occupational exposure limits

Chemical name	ACGIH
ACETONE 67-64-1	25 mg/L - urine (Acetone) - end of shift
XYLENE 1330-20-7	0.3 g/g creatinine - urine (total of all isomers of Methylhippuric acids) - end of shift
ETHYL BENZENE 100-41-4	150 mg/g creatinine - urine (Sum of mandelic acid and phenylglyoxylic acid) - end of shift

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
 Antistatic boots.

Respiratory protection Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

Thermal hazards No information available.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state Aerosol
Appearance No information available
Color Purple
Odor No information available
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	32 °C / 89.6 °F	

Flash point	-104 °C / -155.2 °F	Gives a flame projection at full valve opening or flashback at any degree of valve opening
Evaporation rate	Not applicable	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	12%	-
Lower flammability limit:	2.5%	-
Vapor pressure	>60 psig @ 21.1°C (70°F)	
Vapor density	No data available	
Relative density	0.85	
Water solubility	No data available	
Solubility(ies)	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	451.3°C (844.35°F)	
Decomposition temperature	No data available	
Kinematic viscosity	No Data Available	
Dynamic viscosity	No data available	
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness. May be harmful if inhaled.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral) 6,327.40 mg/kg
ATEmix (dermal) 3,745.20 mg/kg
ATEmix (inhalation-gas) 360,000.00 ppm
ATEmix (inhalation-vapor) 99,999.0000 mg/l
ATEmix (inhalation-dust/mist) 5.14 mg/l

25 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
31 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
55 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
80 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
37 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
PROPANE 74-98-6	-	-	> 800000 ppm (Rat) 15 min
ACETONE 67-64-1	= 5800 mg/kg (Rat)	> 15700 mg/kg (Rabbit)	= 50100 mg/m ³ (Rat) 8 h
PETROLATUM 8009-03-8	-	= 3600 mg/kg (Rabbit)	-
XYLENE 1330-20-7	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
CUMENE 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
XYLENE 1330-20-7	-	Group 3	-	-
ETHYL BENZENE 100-41-4	A3	Group 2B	-	X
CUMENE 98-82-8	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Occupational Safety and Health Administration of the US Department of Labor

X - Present

Reproductive toxicity	No information available.
STOT - single exposure	May cause drowsiness or dizziness.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ACETONE 67-64-1	-	LC50: 4.74 - 6.33mL/L (96h, Oncorhynchus mykiss) LC50: 6210 - 8120mg/L (96h, Pimephales promelas) LC50: =8300mg/L (96h, Lepomis macrochirus)	-	EC50: 10294 - 17704mg/L (48h, Daphnia magna) EC50: 12600 - 12700mg/L (48h, Daphnia magna)
XYLENE 1330-20-7	-	LC50: =13.4mg/L (96h, Pimephales promelas) LC50: 2.661 - 4.093mg/L (96h, Oncorhynchus mykiss) LC50: 13.5 - 17.3mg/L (96h, Oncorhynchus mykiss) LC50: 13.1 - 16.5mg/L (96h, Lepomis macrochirus) LC50: =19mg/L (96h, Lepomis macrochirus)	-	EC50: =3.82mg/L (48h, water flea) LC50: =0.6mg/L (48h, Gammarus lacustris)

		LC50: 7.711 - 9.591mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 23.53 - 29.97mg/L (96h, <i>Pimephales promelas</i>) LC50: =780mg/L (96h, <i>Cyprinus carpio</i>) LC50: >780mg/L (96h, <i>Cyprinus carpio</i>) LC50: 30.26 - 40.75mg/L (96h, <i>Poecilia reticulata</i>)		
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 64742-47-8	-	LC50: =45mg/L (96h, <i>Pimephales promelas</i>) LC50: =2.2mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =2.4mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	-
ETHYL BENZENE 100-41-4	EC50: =4.6mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) EC50: >438mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 2.6 - 11.3mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) EC50: 1.7 - 7.6mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 11.0 - 18.0mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =4.2mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 7.55 - 11mg/L (96h, <i>Pimephales promelas</i>) LC50: =32mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 9.1 - 15.6mg/L (96h, <i>Pimephales promelas</i>) LC50: =9.6mg/L (96h, <i>Poecilia reticulata</i>)	-	EC50: 1.8 - 2.4mg/L (48h, <i>Daphnia magna</i>)
CUMENE 98-82-8	EC50: =2.6mg/L (72h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 6.04 - 6.61mg/L (96h, <i>Pimephales promelas</i>) LC50: =4.8mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =2.7mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =5.1mg/L (96h, <i>Poecilia reticulata</i>)	-	EC50: =0.6mg/L (48h, <i>Daphnia magna</i>) EC50: 7.9 - 14.1mg/L (48h, <i>Daphnia magna</i>)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
PROPANE 74-98-6	1.09
ACETONE 67-64-1	-0.24
XYLENE 1330-20-7	3.15
ETHYL BENZENE 100-41-4	3.6
CUMENE	3.55

98-82-8

Other adverse effects No information available.

13. Disposal considerations**Waste treatment methods**

Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.
US EPA Waste Number	Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information**DOT**

UN number or ID number	1950
Proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1
Emergency Response Guide Number	126

TDG

UN number or ID number	1950
UN proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1

MEX

UN number or ID number	1950
UN proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1

IATA

UN number or ID number	ID 8000
UN proper shipping name	Consumer Commodity
Transport hazard class(es)	9
ERG Code	9L

IMDG

UN number or ID number	1950
UN proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1
EmS-No.	F-D, S-U

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
XYLENE - 1330-20-7	1.0
ETHYL BENZENE - 100-41-4	0.1
CUMENE - 98-82-8	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE 1330-20-7	100 lb	-	-	X
ETHYL BENZENE 100-41-4	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous	Reportable Quantity (RQ)

		Substances RQs	
ACETONE 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
XYLENE 1330-20-7	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
CUMENE 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
ETHYL BENZENE - 100-41-4	Carcinogen
CUMENE - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
ACETONE 67-64-1	X	X	X
PROPANE 74-98-6	X	X	X
XYLENE 1330-20-7	X	X	X
ETHYL BENZENE 100-41-4	X	X	X
CUMENE 98-82-8	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 2 Flammability 4 Instability 0 Special hazards -
HMIS Health hazards 2 * Flammability 4 Physical hazards 0 Personal protection X
Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend**

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value * Skin designation
+ Sensitizers

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision Date 05-Mar-2025

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Recommended use : Toilet Cleaner

Restrictions on use : Use only as directed on label

Manufacturer, importer, supplier : S.C. Johnson and Son, Limited
1 Webster Street
Brantford ON N3T 5R1

Telephone : +1-800-558-5566

Emergency telephone number : 24 Hour Transport & Medical Emergency Phone (866) 231-5406
24 Hour International Emergency Phone (952) 852-4647
24 Hour Canadian Transport Emergency Phone (CANUTEC)
(613) 996-6666

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Globally Harmonized System (GHS) Classification

Hazard classification	Hazard category	Hazards identification
Skin irritation	Category 2	Causes skin irritation.
Eye irritation	Category 2B	Causes eye irritation.

Labelling

Signal word

Warning

Hazard statements

Causes eye irritation.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
Wash hands thoroughly after handling.

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous chemicals present at or above reportable levels as defined by Canadian Hazardous Products Regulation are listed in this table.

Chemical name	CAS-No.	Weight percent
Sodium C14-17 Alkyl Sec Sulfonate	Mixture 68608-26-4	7.00 - 10.00
Lactic Acid	79-33-4	5.00 - 7.00
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	9043-30-5	1.50 - 3.00
Fragrance - Trade Secret	Mixture	1.00 - 1.50

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Skin contact : No special requirements

Inhalation : No special requirements.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Ingestion : No special requirements

Most important symptoms and effects, both acute and delayed

Eyes : No adverse effects expected when used as directed.

Skin effect : No adverse effects expected when used as directed.

Inhalation : No adverse effects expected when used as directed.

Ingestion : May cause abdominal discomfort.
No adverse effects expected when used as directed.

Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Further information : Fight fire with normal precautions from a reasonable distance. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wash thoroughly after handling.

Environmental precautions : Outside of normal use, avoid release to the environment.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal. Clean residue from spill site.

7. HANDLING AND STORAGE

Handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing. For personal protection see section 8. Use only as directed. KEEP OUT OF REACH OF CHILDREN AND PETS. Wash thoroughly after handling.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH or OSHA exposure limits have not been established for this product or reportable ingredients unless noted in the table above.

Personal protective equipment

Respiratory protection : No special requirements.

Hand protection : No special requirements.

Eye protection : No special requirements.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid absorbed by inert carrier material

Color : blue

Odour : characteristic

Odour Threshold : No data available

pH : 2.0 - 2.5
at (25 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper/lower flammability or explosive limits : No data available

Vapour pressure : Not applicable

Vapour density : No data available

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Relative density	: Not applicable	
Solubility(ies)	: negligible	
Partition coefficient: n-octanol/water	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity, dynamic	: not determined	
Viscosity, kinematic	: No data available	
Oxidizing properties	: No data available	
Volatile Organic Compounds Total VOC (wt. %)*	: 0.5 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations	
Other information	: None identified	:

10. STABILITY AND REACTIVITY

Reactivity	: Do not mix with bleach or any other household cleaners.
Chemical stability	: Stable under recommended storage conditions.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

- Possibility of hazardous reactions** : Stable under recommended storage conditions.
- Conditions to avoid** : Direct sources of heat.
- Incompatible materials** : None known.
- Hazardous decomposition products** : Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity** : LD50 910 mg/kg
- Acute inhalation toxicity** : LC50 > 10 mg/L
- Acute dermal toxicity** : LD50 2220 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	No classification proposed	Inhalation - Dust and Mist
Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin irritation	Category 2	-
Eye irritation	Category 2B	-
Skin sensitisation	No classification proposed	-

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-
Carcinogenicity	No classification proposed	-
Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ toxicity - repeated exposure	No classification proposed	-
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition : None known.

12. ECOLOGICAL INFORMATION

Product : The product itself has not been tested.

Toxicity

The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

Toxicity to fish

Components	End point	Species	Value	Exposure time
Sodium C14-17 Alkyl Sec Sulfonate	LC50	Danio rerio (zebra fish)	1 - 10 mg/l	96 h
Lactic Acid	static test LC50	Oncorhynchus mykiss (rainbow trout)	100 - 180 mg/l	96 h

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation

**SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®**

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Ethoxylated Isotridecyl Alcohol (EO # Unknown)	LC50 OECD Test Guideline 203	Danio rerio (zebra fish)	1 - 10 mg/l	96 h
Fragrance - Trade Secret	No data available			

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Sodium C14-17 Alkyl Sec Sulfonate	EC50	Daphnia magna (Water flea)	9.81 mg/l	48 h
Lactic Acid	static test EC50	Daphnia magna (Water flea)	130 mg/l	48 h
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	EC50 OECD Test Guideline 202	Daphnia (water flea)	7.07 mg/l	48 h
Fragrance - Trade Secret	No data available			

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

				time
Sodium C14-17 Alkyl Sec Sulfonate	EC50	Desmodesmus subspicatus (green algae)	> 61 mg/l	72 h
Lactic Acid	static test EC50	Pseudokirchneriella subcapitata (green algae)	> 2,800 mg/l	72 h
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	EC50	Desmodesmus subspicatus (green algae)	> 10 mg/l	72 h
Fragrance - Trade Secret	No data available			

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Sodium C14-17 Alkyl Sec Sulfonate			
Lactic Acid	67 %	20 d	
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	79 %	28 d	Readily biodegradable.
Fragrance - Trade Secret	No data available		

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Sodium C14-17 Alkyl Sec Sulfonate	No data available	No data available
Lactic Acid	No data available	-0.62
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	No data available	3.59
Fragrance - Trade Secret	No data available	No data available

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Mobility

Component	End point	Value
Sodium C14-17 Alkyl Sec Sulfonate	No data available	
Lactic Acid	log Koc	< 1.32
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	No data available	
Fragrance - Trade Secret	No data available	

PBT and vPvB assessment

Component	Results
Sodium C14-17 Alkyl Sec Sulfonate	Not fulfilling PBT and vPvB criteria
Lactic Acid	Not fulfilling PBT and vPvB criteria
Ethoxylated Isotridecyl Alcohol (EO # Unknown)	Not fulfilling PBT and vPvB criteria
Fragrance - Trade Secret	Not fulfilling PBT and vPvB criteria

Other adverse effects : None known.

13. DISPOSAL CONSIDERATIONS

Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

Land transport

Not classified as dangerous in the meaning of transport regulations.

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

- Notification status** : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
- Notification status** : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).
- California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
- Canada Regulations** : This product has been classified in accordance with the hazard criteria of the Hazardous Products Act and Regulations.

16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	0
Reactivity	0

Safety Data Sheet

classification according to Canadian Hazardous Products Regulation



SCRUBBING BUBBLES® HEAVY DUTY FRESH BRUSH®

Version 1.0

Print Date 11/23/2017

Revision Date 05/24/2017

SDS Number 350000023545

NFPA Ratings

Health	2
Fire	0
Reactivity	0
Special	-

This information is being provided in accordance with Canada's Workplace Hazard Material Information System. The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

Further information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Prepared by

SC Johnson Global Safety Assessment &
Regulatory Affairs (GSARA)

Safety Data Sheet

www.rustoleum.com

1. Identification

Product Name:	SK 1GL 4PK ORIGINAL WATERPROOFER	Revision Date:	5/26/2022
Product Identifier:	100001	Supersedes Date:	12/13/2019
Recommended Use:	Waterproofing Sealer/Acrylic		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazards Identification

Classification

Symbol(s) of Product



Signal Word

Warning

GHS HAZARD STATEMENTS

Skin Sensitizer, category 1 H317 May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	For specific treatment see label.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

GHS SDS PRECAUTIONARY STATEMENTS

P363 Wash contaminated clothing before reuse.

3. Composition / Information on Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. % Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	0.1-1.0	GHS06	H331
1,3,5-Triazine-1,3,5(2H,4H,6H)-Triethanol	4719-04-4	0.1-1.0	GHS07	H302-317
5-Chloro-2-Methyl-4-Isothiazolin-3-one Mixture with 2-Methyl-4-Isothiazolin-3-one	55965-84-9	<0.1	GHS05-GHS06-GHS07	H301-310-314-317-330

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed. Remove contact lenses, if present and easy to do. Continue rinsing.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	1.0	N.E.	N.E.	N.E.	N.E.
1,3,5-Triazine-1,3,5(2H,4H,6H)-Triethanol	4719-04-4	1.0	N.E.	N.E.	N.E.	N.E.

Not Yet Specified

5-Chloro-2-Methyl-4- Isothiazolin-3-one Mixture with 2-Methyl-4-Isothiazolin-3-one	55965-84-9	0.1	N.E.	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Mild	Odor Threshold:	N.E.
Specific Gravity:	1.008	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Miscible	Partition Coefficient, n-octanol/ water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	N.A. - N.A.
Boiling Range, °C:	100 - 100	Flash Point, °C:	149
Flammability:	Does not Support Combustion	Auto-Ignition Temp., °C:	N.D.
Evaporation Rate:	Slower than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

Conditions to Avoid: Avoid excess heat. Keep from freezing.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
25265-77-4	2,2,4-Trimethyl-1,3-Pentanediol	3200 mg/kg Rat	>15200 mg/kg Rat	>3.55 mg/L Rat
4719-04-4	Monoisobutyrate 1,3,5-Triazine-1,3,5(2H,4H,6H)-Triethanol	763 mg/kg Rat	>4000 mg/kg Rat	N.E.

Not Yet Specified

55965-84-9 5-Chloro-2-Methyl-4-Isothiazolin-3-one
Mixture with 2-Methyl-4-Isothiazolin-3-one

53 mg/kg Rat

87.12 mg/kg Rabbit

N.E.

N.E. - Not Established

12. Ecological Information**ECOLOGICAL INFORMATION:** Product is a mixture of listed components. No ecotoxicity data was found for this product.**13. Disposal Information****DISPOSAL:** Dispose of material in accordance to local, state, and federal regulations and ordinances.**14. Transport Information**

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	N.A.	N.A.	N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Respiratory or Skin Sensitization

SARA Section 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No SARA 313 components exist in this product.

Toxic Substances Control Act

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:**California Proposition 65****WARNING:**

Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

16. Other Information**HMIS RATINGS**

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

Volatile Organic Compounds: 48 g/L

SDS REVISION DATE: 5/26/2022

REASON FOR REVISION: Substance and/or Product Properties Changed in Section(s):
03 - Composition / Information on Ingredients
09 - Physical & Chemical Properties
11 - Toxicological Information
15 - Regulatory Information
Substance Chemical Name Changed
Product Composition Changed
Substance Hazard Threshold % Changed
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version	Revision Date:	SDS Number:	Print Date: 05/23/2019
2.0	05/22/2019	800010026636	Date of last issue: 05/22/2019

SECTION 1. IDENTIFICATION

Product name : Shell Rotella T4 Triple Protection 15W-40

Product code : 001F8880

Manufacturer or supplier's details

Manufacturer/Supplier : **Shell Oil Products US**
PO Box 4427
Houston TX 77210-4427
USA

SDS Request : (+1) 877-276-7285
Customer Service :

Emergency telephone number

Spill Information : 877-504-9351
Health Information : 877-242-7400

Recommended use of the chemical and restrictions on use

Recommended use : Engine oil.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Long-term (chronic) aquatic hazard : Category 3

GHS label elements

Hazard pictograms	: No symbol
Signal word	: No signal word
Hazard statements	: PHYSICAL HAZARDS: Not classified as a physical hazard under GHS criteria. HEALTH HAZARDS: Not classified as a health hazard under GHS criteria. ENVIRONMENTAL HAZARDS: H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	: Prevention: P273 Avoid release to the environment. Response: No precautionary phrases. Storage: No precautionary phrases.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used oil may contain harmful impurities.

Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Highly refined mineral oils and additives.
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

* contains one or more of the following CAS-numbers: 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-9.

Hazardous components

Chemical name	Synonyms	CAS-No.	Concentration (% w/w)
Alkaryl amine	bis(nonylphenyl)amine	36878-20-3	1 - 3
Calcium sulphonate	Benzenesulphonic acid, mono-C16-24-alkyl derivs., calcium salts	70024-69-0	0.1 - 0.99
Alkyl borate		Not Assigned	0.1 - 0.99
Dialkyl alkaryl aminomethyl dicarboxylate		Not Assigned	0.1 - 0.99
Alcohol, ethoxylated	Alcohols, C12-16, ethoxylated	68551-12-2	0.1 - 0.5
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *		Not Assigned	0 - 90

SECTION 4. FIRST-AID MEASURES

If inhaled : No treatment necessary under normal conditions of use.
If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

		Remove contact lenses, if present and easy to do. Continue rinsing. If persistent irritation occurs, obtain medical attention.
If swallowed	:	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Most important symptoms and effects, both acute and delayed	:	Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.
Protection of first-aiders	:	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
Indication of any immediate medical attention and special treatment needed	:	Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	:	Do not use water in a jet.
Specific hazards during fire-fighting	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	:	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid contact with skin and eyes.
Environmental precautions	:	Local authorities should be advised if significant spillages cannot be contained.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version 2.0	Revision Date: 05/22/2019	SDS Number: 800010026636	Print Date: 05/23/2019 Date of last issue: 05/22/2019

Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Additional advice : For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

Technical measures : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Product Transfer : Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.

Further information on storage stability : Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers. Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene. Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m ³	OSHA Z-1
Oil mist, mineral		TWA (Inhalable fraction)	5 mg/m ³	ACGIH

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods <http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods <http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances <http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany <http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

Engineering measures : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating,

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers.
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Hand protection
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Protective measures : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Thermal hazards : Not applicable

Environmental exposure controls

General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Section 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : Clear amber

Odour : Slight hydrocarbon

Odour Threshold : Data not available

pH : Not applicable

pour point : -36 °C / -33 °F
Method: ASTM D97

Initial boiling point and boiling range : > 280 °C / 536 °F
estimated value(s)

Flash point : 234 °C / 453 °F
Method: ASTM D92 (COC)

Evaporation rate : Data not available

Flammability (solid, gas) : Data not available

Upper explosion limit / upper flammability limit : Typical 10 %(V)

Lower explosion limit / Lower flammability limit : Typical 1 %(V)

Vapour pressure : < 0.5 Pa (20 °C / 68 °F)
estimated value(s)

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version	Revision Date:	SDS Number:	Print Date: 05/23/2019
2.0	05/22/2019	800010026636	Date of last issue: 05/22/2019

Relative vapour density	:	> 1 estimated value(s)
Relative density	:	0.878 (15 °C / 59 °F)
Density	:	878 kg/m ³ (15.0 °C / 59.0 °F) Method: ASTM D4052
Solubility(ies)		
Water solubility	:	negligible
Solubility in other solvents	:	Data not available
Partition coefficient: n-octanol/water	:	log Pow: > 6 (based on information on similar products)
Auto-ignition temperature	:	> 320 °C / 608 °F
Decomposition temperature	:	Data not available
Viscosity		
Viscosity, dynamic	:	Data not available
Viscosity, kinematic	:	14.9 mm ² /s (100 °C / 212 °F) Method: ASTM D445
Explosive properties	:	Not classified
Oxidizing properties	:	Data not available
Conductivity	:	This material is not expected to be a static accumulator.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	:	Stable.
Possibility of hazardous reactions	:	Reacts with strong oxidising agents.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Strong oxidising agents.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Basis for assessment : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Product:

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity : Remarks: Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Remarks: Not a skin sensitiser.
Based on available data, the classification criteria are not met.

Components:

Calcium sulphonate:

Remarks: May cause an allergic skin reaction in sensitive individuals.

Remarks: Classified Skin Sensitiser Category 1B.

Alkyl borate:

Remarks: May cause an allergic skin reaction in sensitive individuals.

Remarks: Classified Skin Sensitiser Category 1B.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Dialkyl alkaryl aminomethyl dicarboxylate:

Remarks: May cause an allergic skin reaction in sensitive individuals.

Remarks: Classified Skin Sensitiser Category 1B.

Germ cell mutagenicity

Product:

: Remarks: Non mutagenic, Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

: Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Remarks: Based on available data, the classification criteria are not met.

Aspiration toxicity

Product:

Not an aspiration hazard.

Further information

Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Continuous contact with used engine oils has caused skin cancer in animal tests.

Remarks: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.
Information given is based on a knowledge of the components and the ecotoxicology of similar products.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

Ecotoxicity

Product:

Toxicity to fish (Acute toxicity) :
Remarks: LL/EL/IL50 10-100 mg/l
Harmful

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) :
Remarks: LL/EL/IL50 10-100 mg/l
Harmful

Toxicity to algae (Acute toxicity) :
Remarks: LL/EL/IL50 10-100 mg/l
Harmful

Toxicity to fish (Chronic toxicity) :
Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) :
Remarks: Data not available

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Toxicity to microorganisms : Remarks: Data not available
(Acute toxicity)

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.
Major constituents are inherently biodegradable, but contains components that may persist in the environment.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Contains components with the potential to bioaccumulate.

Mobility in soil

Product:

Mobility : Remarks: Liquid under most environmental conditions.
If it enters soil, it will adsorb to soil particles and will not be mobile.

Remarks: Floats on water.

Other adverse effects

Product:

Additional ecological information : Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential.
Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use.

Poorly soluble mixture.
Causes physical fouling of aquatic organisms.

Mineral oil does not cause chronic toxicity to aquatic organisms at concentrations less than 1 mg/l.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Recover or recycle if possible.
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
Do not dispose into the environment, in drains or in water courses

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation

Remarks : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied. MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
benzene	71-43-2	10	10 (D018)
2-methylpropan-1-ol	78-83-1	100	100 (F005)
benzene	71-43-2	10	*

*: Calculated RQ exceeds reasonably attainable upper limit., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA., The components with RQs are given for information.

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version	Revision Date:	SDS Number:	Print Date: 05/23/2019
2.0	05/22/2019	800010026636	Date of last issue: 05/22/2019

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

benzene	71-43-2	0.0002 %

US State Regulations

Pennsylvania Right To Know

Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0
Zinc dialkyl dithiophosphate	84605-29-8
Diphenylamine	122-39-4

California Prop. 65

WARNING: This product can expose you to chemicals including benzene, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8

Other regulations:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

The components of this product are reported in the following inventories:

EINECS	: Not all components listed.
TSCA	: All components listed.
DSL	: All components listed.

SECTION 16. OTHER INFORMATION

Further information

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version	Revision Date:	SDS Number:	Print Date: 05/23/2019
2.0	05/22/2019	800010026636	Date of last issue: 05/22/2019

NFPA Rating (Health, Fire, Reactivity) 0, 1, 0

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average
Abbreviations and Acronyms	:	The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial Hygienists
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
AICS = Australian Inventory of Chemical Substances
ASTM = American Society for Testing and Materials
BEL = Biological exposure limits
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
CAS = Chemical Abstracts Service
CEFIC = European Chemical Industry Council
CLP = Classification Packaging and Labelling
COC = Cleveland Open-Cup
DIN = Deutsches Institut für Normung
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
DSL = Canada Domestic Substance List
EC = European Commission
EC50 = Effective Concentration fifty
ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals
ECHA = European Chemicals Agency
EINECS = The European Inventory of Existing Commercial Chemical Substances
EL50 = Effective Loading fifty
ENCS = Japanese Existing and New Chemical Substances Inventory
EWC = European Waste Code
GHS = Globally Harmonised System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IC50 = Inhibitory Concentration fifty
IL50 = Inhibitory Level fifty
IMDG = International Maritime Dangerous Goods
INV = Chinese Chemicals Inventory
IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables
KECI = Korea Existing Chemicals Inventory
LC50 = Lethal Concentration fifty
LD50 = Lethal Dose fifty per cent.
LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR
1910.1200

Shell Rotella T4 Triple Protection 15W-40

Version
2.0

Revision Date:
05/22/2019

SDS Number:
800010026636

Print Date: 05/23/2019
Date of last issue: 05/22/2019

LL50 = Lethal Loading fifty
MARPOL = International Convention for the Prevention of
Pollution From Ships
NOEC/NOEL = No Observed Effect Concentration / No Ob-
served Effect Level
OE_HP V = Occupational Exposure - High Production Volume
PBT = Persistent, Bioaccumulative and Toxic
PICCS = Philippine Inventory of Chemicals and Chemical
Substances
PNEC = Predicted No Effect Concentration
REACH = Registration Evaluation And Authorisation Of
Chemicals
RID = Regulations Relating to International Carriage of Dan-
gerous Goods by Rail
SKIN_DES = Skin Designation
STEL = Short term exposure limit
TRA = Targeted Risk Assessment
TSCA = US Toxic Substances Control Act
TWA = Time-Weighted Average
vPvB = very Persistent and very Bioaccumulative

A vertical bar (|) in the left margin indicates an amendment from the previous version.

Sources of key data used to compile the Safety Data Sheet : The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID date base, EC 1272 regulation, etc).

Revision Date : 05/22/2019

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Shell Tellus S4 ME 46

Product code : 001D7767

Manufacturer or supplier's details

Supplier : Viva Energy Australia Pty Ltd
(Formerly: The Shell Company of Australia)
(ABN 46 004 610 459)
720 Bourke Street
Docklands
Victoria 3008
Australia

Telephone : +61 (0)3 8823 4444

Telefax : +61 (0)3 8823 4800

Emergency telephone number : 1800 651 818 (Australia).
; POISONS INFORMATION CENTRE: 13 11 26 (Australia).

Recommended use of the chemical and restrictions on use

Recommended use : Hydraulic oil

Restrictions on use : This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms : 

Signal word : No signal word

Hazard statements : PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Precautionary statements :

HEALTH HAZARDS:

Not classified as a health hazard under GHS criteria.

ENVIRONMENTAL HAZARDS:

H411 Toxic to aquatic life with long lasting effects.

Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Storage:

No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities. High-pressure injection under the skin may cause serious damage including local necrosis. Not classified as flammable but will burn.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

3.2 Mixtures

Chemical nature : Blend of polyolefins and additives.

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]	68937-41-7	Repr.2; H361 STOT RE2; H373 Aquatic Chronic1; H410	0.25 - 0.9
Alkyl amine	61788-46-3	Acute Tox.4; H302 Asp. Tox.1; H304	0.015 - 0.024

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

		Skin Corr.1; H314 STOT SE3; H335 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	
Ethoxylated alkylamine	25307-17-9		0.01 - 0.024

For explanation of abbreviations see section 16.

SECTION 4. FIRST-AID MEASURES

- If inhaled : No treatment necessary under normal conditions of use.
If symptoms persist, obtain medical advice.
- In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
If persistent irritation occurs, obtain medical attention.
- When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.
Obtain medical attention even in the absence of apparent wounds.
- In case of eye contact : Flush eye with copious quantities of water.
Remove contact lenses, if present and easy to do. Continue rinsing.
If persistent irritation occurs, obtain medical attention.
- If swallowed : In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
- Most important symptoms and effects, both acute and delayed : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.
Ingestion may result in nausea, vomiting and/or diarrhoea.
- Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.
- Protection of first-aiders : When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
- Notes to physician : Treat symptomatically.
- High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

damage and loss of function.
Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- Unsuitable extinguishing media : Do not use water in a jet.
- Specific hazards during firefighting : Hazardous combustion products may include:
A complex mixture of airborne solid and liquid particulates and gases (smoke).
Carbon monoxide may be evolved if incomplete combustion occurs.
Unidentified organic and inorganic compounds.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.
- Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material.
Reclaim liquid directly or in an absorbent.
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Additional advice : For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.
For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

SECTION 7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.
Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling : Avoid prolonged or repeated contact with skin.
Avoid inhaling vapour and/or mists.
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Product Transfer : Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.

Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place.
Use properly labeled and closable containers.
Must be stored in a diked (bunded) area.

Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.
Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Biological occupational exposure limits

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances
<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany
<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

Engineering measures

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment

Protective measures

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Hand protection
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.

Thermal hazards : Not applicable

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Environmental exposure controls

General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Section 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid at room temperature.

Colour : light brown

Odour : Slight hydrocarbon

Odour Threshold : Data not available

pH : Not applicable

Pour point : -51 °C / -60 °F
Method: ISO 3016

Melting / freezing point : Data not available

Initial boiling point and boiling range : > 280 °C / 536 °F estimated value(s)

Flash point : 250 °C / 482 °F
Method: ISO 2592

Evaporation rate : Data not available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Not classified as flammable but will burn.

Upper explosion limit : Typical 10 %(V)

Lower explosion limit : Typical 1 %(V)

Vapour pressure : < 0.5 Pa (20 °C / 68 °F)
estimated value(s)

Relative vapour density : > 1 estimated value(s)

Relative density : 0.832 (15 °C / 59 °F)

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Density	: 832 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185
	832 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: Data not available
Partition coefficient: n-octanol/water	: log Pow: > 6 (based on information on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F
Decomposition temperature	: Data not available
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 46 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445
	7.7 mm2/s (100 °C / 212 °F) Method: ASTM D445
Particle characteristics	
Particle size	: Data not available
Explosive properties	: Classification Code: Not classified
Oxidizing properties	: Data not available
Conductivity	: This material is not expected to be a static accumulator.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	: Stable.
Possibility of hazardous reactions	: Reacts with strong oxidising agents.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidising agents.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment	: Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
Exposure routes	: Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Product:

Acute oral toxicity	: LD50 rat: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification criteria are not met.
Acute inhalation toxicity	: Remarks: Based on available data, the classification criteria are not met.
Acute dermal toxicity	: LD50 Rabbit: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Remarks: Not a skin sensitiser.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Components:

Ethoxylated alkylamine:

Remarks: May cause an allergic skin reaction in sensitive individuals.

Chronic toxicity

Germ cell mutagenicity

Product:

: Remarks: Non mutagenic, Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Material	GHS/CLP Carcinogenicity Classification
Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]	No carcinogenicity classification.
Alkyl amine	No carcinogenicity classification.
Ethoxylated alkylamine	No carcinogenicity classification.

Reproductive toxicity

Product:

: Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Aspiration toxicity

Product:

Not an aspiration hazard.

Further information

Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Remarks: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.
Information given is based on a knowledge of the components and the ecotoxicology of similar products.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Ecotoxicity

Product:

Toxicity to fish (Acute toxicity) :
Remarks: LL/EL/IL50 1-10 mg/l
Toxic

Toxicity to crustacean (Acute toxicity) :
Remarks: LL/EL/IL50 1-10 mg/l
Toxic

Toxicity to algae/aquatic plants (Acute toxicity) :
Remarks: LL/EL/IL50 1-10 mg/l
Toxic

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to crustacean (Chronic toxicity) : Remarks: Data not available

Toxicity to microorganisms (Acute toxicity) : Remarks: Data not available

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Components:

Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%] :

Toxicity to fish (Acute toxicity) : LC50 (Pimephales promelas (fathead minnow)): 10.8 mg/l
Exposure time: 96 h
Method: Test(s) equivalent or similar to OECD Guideline 203

Toxicity to crustacean (Acute toxicity) : EC50 (Daphnia magna (Water flea)): 1.5 mg/l
Exposure time: 48 h
Method: Test(s) equivalent or similar to OECD Guideline 202

Toxicity to algae/aquatic plants (Acute toxicity) : EC50 (Raphidocelis subcapitata (freshwater green alga)): > 2.5 mg/l
Exposure time: 96 h
Method: Test(s) equivalent or similar to OECD Test Guideline 201

Toxicity to microorganisms (Acute toxicity) : EC50 : > 1,000 mg/l
Exposure time: 3 h
Method: Test(s) equivalent or similar to OECD Guideline 209

Toxicity to fish (Chronic toxicity) : NOEC: 3.1 µg/l
Exposure time: 33 d
Species: Pimephales promelas (fathead minnow)
Method: Test(s) equivalent or similar to OECD Guideline 210

Toxicity to crustacean (Chronic toxicity) : NOEC: 41.5 µg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: Test(s) equivalent or similar to OECD Guideline 211

M-Factor (Long-term (chronic) aquatic hazard) : 10

Alkyl amine :

M-Factor (Short-term (acute) aquatic hazard) : 10

M-Factor (Long-term (chronic) aquatic hazard) : 10

Ethoxylated alkylamine :

M-Factor (Short-term (acute) aquatic hazard) : 10

M-Factor (Long-term (chronic) aquatic hazard) : 1

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable., Major constituents are inherently biodegradable, but contains components that may persist in the environment.

Components:

Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%] :

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Biodegradability	: Exposure time: 28 d Method: Test(s) equivalent or similar to OECD Guideline 301D Remarks: Not readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation	: Remarks: Contains components with the potential to bioaccumulate.

Partition coefficient: n-octanol/water	: log Pow: > 6Remarks: (based on information on similar products)

Components:

Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%] :

Bioaccumulation	: Species: Lepomis macrochirus (Bluegill sunfish) Bioconcentration factor (BCF): 634 Method: Test(s) equivalent or similar to OECD Test Guideline 305 Remarks: Does not bioaccumulate.

Mobility in soil

Product:

Mobility	: Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water.

Other adverse effects

No data available

Product:

Additional ecological information	: Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use. Poorly soluble mixture., Causes physical fouling of aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation
Remarks : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))
Class : 9
Packing group : III
Labels : 9

International Regulations

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

IMDG-Code

UN number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, isopropylated phosphate (3:1) (Triphenyl phosphate > 5%))
Class	: 9
Packing group	: III
Labels	: 9
Marine pollutant	: no

Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks	: Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Therapeutic Goods (Poisons Standard) Instrument	: No poison schedule number allocated

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Product classified as per Work Health Safety Regulations – Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 2012 and SDS prepared as per national model code of practice for preparation of safety data sheet for Hazardous chemicals 2020 based on Globally Harmonized Classification version 7.

National Model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2011).

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code). Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Other international regulations

The components of this product are reported in the following inventories:

TSCA	: All components listed.
AIIC	: Listed introduction

SECTION 16. OTHER INFORMATION

Full text of H-Statements

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Asp. Tox.	Aspiration hazard
Repr.	Reproductive toxicity
Skin Corr.	Skin corrosion
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Abbreviations and Acronyms

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date of preparation or review : 12.03.2025

SAFETY DATA SHEET

Shell Tellus S4 ME 46

Version 5.0

Revision Date
12.03.2025

Print Date 13.03.2025

Further information

Training advice : Provide adequate information, instruction and training for operators.

Other information : A vertical bar (|) in the left margin indicates an amendment from the previous version.

Sources of key data used to compile the Safety Data Sheet : The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID data base, EC 1272 regulation, etc).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Shell Tellus S2 MX 32

Product code : 001F8438

Manufacturer or supplier's details

Supplier : Viva Energy Australia Pty Ltd
(Formerly: The Shell Company of Australia)
(ABN 46 004 610 459)
720 Bourke Street
Docklands
Victoria 3008
Australia

Telephone : +61 (0)3 8823 4444

Telefax : +61 (0)3 8823 4800

Emergency telephone number : 1800 651 818 (Australia). ; POISONS INFORMATION CENTRE: 13 11 26 (Australia).

Recommended use of the chemical and restrictions on use

Recommended use : Hydraulic oil

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Based on available data this substance / mixture does not meet the classification criteria.

GHS label elements

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.
HEALTH HAZARDS:
Not classified as a health hazard under GHS criteria.
ENVIRONMENTAL HAZARDS:
Not classified as an environmental hazard under GHS criteria.

Precautionary statements :
Prevention:
No precautionary phrases.

Response:
No precautionary phrases.

Storage:

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

No precautionary phrases.

Disposal:

No precautionary phrases.

Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities. High-pressure injection under the skin may cause serious damage including local necrosis. Not classified as flammable but will burn.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

- Substance / Mixture : Mixture
- Chemical nature : Highly refined mineral oils and additives.
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.
Classification based on DMSO extract content < 3%
(Regulation (EC) 1272/2008, Annex VI, Part 3, Note L).
- : * contains one or more of the following CAS-numbers: 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-9, 68649-12-7, 151006-60-9, 163149-28-8, 64741-88-4, 64741-89-5.

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	Not Assigned	Asp. Tox.1; H304	0 - 90
2,6-di-tert-butyl phenol	128-39-2	Skin Irrit.2; H315 Aquatic Acute1; H400 Aquatic Chronic1; H410	0 - 0.24
Triazole derivative	91273-04-0	Skin Corr.1B; H314 Skin Sens.1A; H317 Aquatic Chronic1; H410 Aquatic Acute2; H401	0 - 0.09

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

SECTION 4. FIRST-AID MEASURES

If inhaled	:	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
In case of skin contact	:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.
In case of eye contact	:	Flush eye with copious quantities of water. Remove contact lenses, if present and easy to do. Continue rinsing. If persistent irritation occurs, obtain medical attention.
If swallowed	:	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Most important symptoms and effects, both acute and delayed	:	Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.
Protection of first-aiders	:	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
Notes to physician	:	Treat symptomatically. High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media	: Do not use water in a jet.
Specific hazards during firefighting	: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).
Hazchem Code	: NONE

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Avoid contact with skin and eyes.
Environmental precautions	: Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	: Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional advice	: For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

SECTION 7. HANDLING AND STORAGE

- General Precautions : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.
Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Advice on safe handling : Avoid prolonged or repeated contact with skin.
Avoid inhaling vapour and/or mists.
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.
- Avoidance of contact : Strong oxidising agents.
- Product Transfer : Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.
- Storage**
- Other data : Keep container tightly closed and in a cool, well-ventilated place.
Use properly labeled and closable containers.

Store at ambient temperature.
- Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.
Unsuitable material: PVC.
- Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m3	AU OEL
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m3	Australia. Workplace Exposure Standards for Airborne Contaminant s.
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m3	OSHA Z-1

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

Oil mist, mineral	Not Assigned	TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances
<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany
<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

Engineering measures

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

contaminated clothing and footwear that cannot be cleaned.
Practice good housekeeping.

Personal protective equipment

Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Hand protection
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

- Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.
- Thermal hazards : Not applicable

Environmental exposure controls

- General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Section 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : clear
- Odour : Data not available
- Odour Threshold : Data not available
- pH : Not applicable
- pour point : -30 °C / -22 °F
Method: ISO 3016
- Melting / freezing point : Data not available
- Initial boiling point and boiling range : > 280 °C / 536 °F
Estimated value(s)
- Flash point : 220 °C / 428 °F
Method: ISO 2592
- Evaporation rate : Data not available
- Flammability (solid, gas) : Not applicable
- Flammability (liquids) : Not classified as flammable but will burn.
- Upper explosion limit : Typical 10 %(V)
- Lower explosion limit : Typical 1 %(V)
- Vapour pressure : < 0.5 Pa (20 °C / 68 °F)

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

	estimated value(s)
Relative vapour density	: > 5
Relative density	: 0.854 (15 °C / 59 °F)
Density	: 854 kg/m ³ (15.0 °C / 59.0 °F) Method: ISO 12185
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: Data not available
Partition coefficient: n-octanol/water	: log Pow: > 6 (based on information on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F
Decomposition temperature	: Data not available
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 32 mm ² /s (40.0 °C / 104.0 °F) Method: ASTM D445
	5.4 mm ² /s (100 °C / 212 °F) Method: ASTM D445
	340 mm ² /s (0 °C / 32 °F) Method: ASTM D445
Explosive properties	: Classification Code: Not classified
Oxidizing properties	: Data not available
Conductivity	: This material is not expected to be a static accumulator.
Particle size	: Data not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	: Stable.
Possibility of hazardous	: Reacts with strong oxidising agents.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

reactions

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Exposure routes : Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute toxicity

Product:

Acute oral toxicity : LD50 rat: > 5,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity : Remarks: Based on available data, the classification criteria are not met.

Acute dermal toxicity : LD50 Rabbit: > 5,000 mg/kg
Remarks: Low toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Remarks: Not a skin sensitiser.
Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

Components:

Triazole derivative:

Remarks: May cause an allergic skin reaction in sensitive individuals.

Chronic toxicity

Germ cell mutagenicity

Product:

: Remarks: Non mutagenic, Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

Material	GHS/CLP Carcinogenicity Classification
Highly refined mineral oil	No carcinogenicity classification.

Reproductive toxicity

Product:

: Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

Aspiration toxicity

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

Product:

Not an aspiration hazard.

Further information

Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Remarks: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.
Information given is based on a knowledge of the components and the ecotoxicology of similar products.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Ecotoxicity

Product:

Toxicity to fish (Acute toxicity) :
Remarks: Based on available data, the classification criteria are not met.
Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute toxicity) :
Remarks: Based on available data, the classification criteria are not met.
Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity) :
Remarks: Based on available data, the classification criteria are not met.
Practically non toxic:
LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) :
Remarks: Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

Toxicity to crustacean (Chronic toxicity) : Remarks: Based on available data, the classification criteria are not met.

Toxicity to microorganisms (Acute toxicity) : Remarks: Based on available data, the classification criteria are not met.

Components:

2,6-di-tert-butyl phenol :

M-Factor (Short-term (acute) aquatic hazard) : 1

Triazole derivative :

M-Factor (Short-term (acute) aquatic hazard) : 1

M-Factor (Long-term (chronic) aquatic hazard) : 1

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable., Major constituents are inherently biodegradable, but contains components that may persist in the environment., Persistent per IMO criteria., International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distills at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Contains components with the potential to bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: > 6Remarks: (based on information on similar products)

Mobility in soil

Product:

Mobility : Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile.
Remarks: Floats on water.

Other adverse effects

no data available

Product:

Additional ecological information : Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Product is a mixture of non-volatile components, which will not be

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

released to air in any significant quantities under normal conditions of use.

Poorly soluble mixture., Causes physical fouling of aquatic organisms.

Mineral oil does not cause chronic toxicity to aquatic organisms at concentrations less than 1 mg/l.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

Do not dispose into the environment, in drains or in water courses

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging

: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation
Remarks

: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

ADG

Not regulated as a dangerous good

International Regulations

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Standard for the Uniform : No poison schedule number allocated
Scheduling of Medicines and
Poisons

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Product classified as per Work Health Safety Regulations – Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 2012 and SDS prepared as per national model code of practice for preparation of safety data sheet for Hazardous chemicals 2020 based on Globally Harmonized Classification version 7.

National Model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2011).

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code). Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Other international regulations

The components of this product are reported in the following inventories:

REACH : Not established.
TSCA : All components listed.
AIIIC : Listed introduction

SECTION 16. OTHER INFORMATION

Full text of H-Statements

H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Asp. Tox.	Aspiration hazard
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation

Abbreviations and Acronyms

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date of preparation or review : 17.10.2022

Further information

Training advice :

Provide adequate information, instruction and training for operators.

SAFETY DATA SHEET

Shell Tellus S2 MX 32

Version 1.4

Revision Date 17.10.2022

Print Date 18.10.2022

Other information : No Exposure Scenario annex is attached to this safety data sheet. It is a non-classified mixture containing hazardous substances as detailed in Section 3; relevant information from Exposure Scenarios for the hazardous substances contained have been integrated into the core sections 1-16 of this SDS.

Other information A vertical bar (|) in the left margin indicates an amendment from the previous version.

Sources of key data used to compile the Safety Data Sheet :

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID data base, EC 1272 regulation, etc).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

AU / EN

SAFETY DATA SHEET

SherLoxane 800 Part A
White/LTB
254001

Section 1. Identification

Product identifier : SherLoxane 800 Part A
White/LTB
Product code : 254001
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Material uses : Paint or paint related material.
: Industrial use only.

Supplier's details : VALSPAR PAINT (AUSTRALIA) PTY LIMITED
L3, 2 Burbank Place,
Baulkham Hills, NSW, 2153

Emergency telephone number (with hours of operation) : +(61)290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
SKIN SENSITISATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : **WARNING**

Hazard statements : **Combustible liquid.**
Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking. Avoid breathing vapour. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store in a well-ventilated place. Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Other hazards which do not result in classification : None known.

Section 3. Composition and ingredient information

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

Not available.

Ingredient name	% (w/w)	CAS number
Epoxy Polymer	10 - <30%	30583-72-3
Pentamethyliperidyl Sebacate	<10%	41556-26-7
Polycarboxylic acid ester	<1%	91001-64-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

- Hazchem code** : 3Z

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental

Section 7. Handling and storage

contamination. See Section 10 for incompatible materials before handling or use.
Avoid release to the environment.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

- Biological limit values** : There is no biological limit allocated.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Not available.
Odour	: Not available.
Odour threshold	: Not available.
pH	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 93°C (199.4°F) [Pensky-Martens Closed Cup]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapour pressure	: Not relevant/applicable due to nature of the product.
Vapour density	: Not available.
Relative density	: 1.44
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm ² /s (>20.5 cSt)

Aerosol product

Heat of combustion	: 1.933 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Section 11. Toxicological information

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Section 11. Toxicological information

Not available.

General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})	: Not available.

Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	IATA
UN number	Not regulated.	UN3082	UN3082	UN3082
UN proper shipping name	Not regulated.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pentamethyliperidyl Sebacate, Pentamethyliperidyl Sebacate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis (pentamethyl-4-piperidyl)sebacate, Pentamethyliperidyl Sebacate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis (pentamethyl-4-piperidyl)sebacate, Pentamethyliperidyl Sebacate)
Transport hazard class(es)	Not regulated.	9  	9  	9  
Packing group	Not applicable.	III	III	III
Environmental hazards	Not applicable.	Yes.	Yes.	Yes.
Additional information	Hazchem code 3Z	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Tunnel code E	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

<u>Ingredient name</u>	<u>Schedule</u>
crystalline silica, respirable powder	Prohibited [For abrasive blasting at a concentration of greater than 1%]

Agricultural and Veterinary Chemicals Code Act 1994

Not available.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Section 15. Regulatory information

Not listed.

[Montreal Protocol \(Annexes A, B, C, E\)](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

Section 16. Any other relevant information

[History](#)

Date of printing : 14, February, 2020.

Date of issue/Date of revision : 14, February, 2020

Date of previous issue : 11, February, 2020

Version : 5.01

[Key to abbreviations](#)

ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

[Procedure used to derive the classification](#)

Classification	Justification
FLAMMABLE LIQUIDS - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1	On basis of test data Calculation method Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

[Notice to reader](#)

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become make themselves aware of and understand the data contained in this SDS and any hazards that may be associated with the product. This information is provided in good faith and believed to be accurate as of the effective date mentioned herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can may change later the composition, hazards and risks of the product. Products shall should not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to, the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The

Section 16. Any other relevant information

conditions for the use of the product are not under the manufacturer's control of the manufacturer; the customer/buyer/user is responsible to for determine determining the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS, without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be held responsible for SDSs obtained from any other source.

End of SDS

Section 1: IDENTIFICATION**Product Name:** Simple Green® All-Purpose Cleaner Lemon Scent**Additional Names:****Manufacturer's Part Number:** **Please refer to Section 16***Recommended Use:** Cleaner & Degreaser for water tolerant surfaces.**Restrictions on Use:** Do not use on non-rinseable surfaces.**Company:** Sunshine Makers, Inc.
15922 Pacific Coast Highway
Huntington Beach, CA 92649 USA**Telephone:** 800-228-0709 • 562-795-6000 Mon – Fri, 8am – 5pm PST**Fax:** 562-592-3830**Email:** info@simplegreen.com**Emergency Phone:** Chem-Tel 24-Hour Emergency Service: 800-255-3924**Section 2: HAZARDS IDENTIFICATION****This product is not considered hazardous under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).**OSHA HCS 2012Label Elements**Signal Word:** None**Hazard Symbol(s)/Pictogram(s):** None required**Hazard Statements:** None**Precautionary Statements:** None**Hazards Not Otherwise Classified (HNOC):** None**Other Information:** None Known**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS Number</u>	<u>Percent Range</u>
Water	7732-18-5	> 85.000%*
Surfactant	Proprietary Mixture	< 5.000%*
C9-11 Alcohols Ethoxylated	68439-46-3	< 5.000%*
Tetrasodium Glutamate Diacetate	51981-21-6	< 2.000%*
Sodium Bicarbonate	144-55-8	< 1.000%*
Hydrochloric Acid	77-92-9	< 1.000%*
Fragrances	Proprietary Mixture	< 1.000%*
Citral	5392-40-5	< 0.100%*
Limonene	5989-27-5	< 0.100%*
Hexyl Cinnamal	101-86-0	< 0.100%*
Polyoxyalkylene Substituted Chromophore (Yellow)	Proprietary Mixture	< 0.010%*
Methylchloroisothiazolinone	26172-55-4	< 0.001%*
Methylisothiazolinone	2682-20-4	< 0.0001%*

specific percentages of composition are being withheld as a trade secret*Section 4: FIRST-AID MEASURES****Inhalation:** Not expected to cause respiratory irritation. If adverse effect occurs, move to fresh air.**Skin Contact:** Not expected to cause skin irritation. If adverse effect occurs, rinse skin with water.**Eye Contact:** Not expected to cause eye irritation. If adverse effect occurs, flush eyes with water.**Ingestion:** May cause upset stomach. Drink plenty of water to dilute. See section 11.**Most Important Symptoms/Effects, Acute and Delayed:** None known.**Section 4: FIRST-AID MEASURES - continued**

Indication of Immediate Medical Attention and Special Treatment Needed, if necessary: Treat symptomatically

Section 5: FIRE-FIGHTING MEASURES

Suitable & Unsuitable Extinguishing Media: Use Dry chemical, CO₂, water spray or “alcohol” foam. Avoid high volume jet water.
Specific Hazards Arising from Chemical: In event of fire, fire created carbon oxides may be formed.
Special Protective Actions for Fire-Fighters: Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

This product is non-flammable. See Section 9 for Physical Properties.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: *For non-emergency and emergency personnel:* See section 8 – personal protection. Avoid eye contact. Safety goggles suggested.

Environmental Precautions: Do not allow into open waterways and ground water systems.

Methods and Materials for Containment and Clean Up: Dike or soak up with inert absorbent material. See section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Ensure adequate ventilation. Keep out of reach of children. Keep away from heat, sparks, open flame and direct sunlight. Do not pierce any part of the container. Do not mix or contaminate with any other chemical. Do not eat, drink or smoke while using this product.

Conditions for Safe Storage including Incompatibilities: Keep container tightly closed. Keep in cool dry area. Avoid prolonged exposure to sunlight. Do not store at temperatures above 109°F (42.7°C). If separation occurs, mix the product for reconstitution.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values: No components listed with TWA or STEL values under OSHA or ACGIH.

Appropriate Engineering Controls: Showers, eyewash stations, ventilation systems

Individual Protection Measures / Personal Protective Equipment (PPE)

Eye Contact: Use protective glasses or safety goggles if splashing or spray-back is likely.
Respiratory: Use in well ventilated areas or local exhaust ventilations when cleaning small spaces.
Skin Contact: Use protective gloves (any material) when used for prolonged periods or dermally sensitive.
General Hygiene Considerations: Wash thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow Liquid	Partition Coefficient: n-octanol/water:	Not determined
Odor:	Added Lemon odor	Autoignition Temperature:	Non-flammable
Odor Threshold:	Not determined	Decomposition Temperature:	42.7°C (109°F)
pH:	8.5 – 9.2	Viscosity:	Like water
Freezing Point:	0-3.33°C (32-38°F)	Specific Gravity:	1.01 – 1.03
Boiling Point & Range:	101°C (213.8°F)	VOCs:	**Water & fragrance exemption in calculation

Section 9: PHYSICAL AND CHEMICAL PROPERTIES - continued

Flash Point:	> 212°F	SCAQMD 304-91 / EPA 24:	0 g/L	0 lb/gal	0%
Evaporation Rate:	Not determined	CARB Method 310**:	2.5 g/L	0.021 lb/gal	0.25%
Flammability (solid, gas):	Not applicable	SCAQMD Method 313:	Not tested		
Upper/Lower Flammability or Explosive Limits:	Not applicable	VOC Composite Partial Pressure:	Not determined		
Vapor Pressure:	0.60 PSI @77°F, 2.05 PSI @100°F	Relative Density ASTM D-4017:	8.42 – 8.59 lb/gal		
Vapor Density:	Not determined	Solubility:	100% in water		

Section 10: STABILITY AND REACTIVITY

Reactivity:	Non-reactive.
Chemical Stability:	Stable under normal conditions 70°F (21°C) and 14.7 psig (760 mmHg).
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Excessive heat or cold.
Incompatible Materials:	Do not mix with oxidizers, acids, bathroom cleaners, or disinfecting agents.
Hazardous Decomposition Products:	Normal products of combustion - CO, CO ₂ .

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Inhalation -	Overexposure may cause headache.
	Skin Contact -	Not expected to cause irritation, repeated contact may cause dry skin.
	Eye Contact -	Not expected to cause irritation.
	Ingestion -	May cause upset stomach.

Symptoms related to the physical, chemical and toxicological characteristics: no symptoms expected under typical use conditions.
Delayed and immediate effects and or chronic effects from short term exposure: no symptoms expected under typical use conditions.
Delayed and immediate effects and or chronic effects from long term exposure: headache, dry skin, or skin irritation may occur.
Interactive effects: Not known.

Numerical Measures of Toxicity

Acute Toxicity:	Oral LD ₅₀ (rat)	> 5 g/kg body weight
	Dermal LD ₅₀ (rabbit)	> 5 g/kg body weight
<i>Calculated via OSHA HCS 2012 / Globally Harmonized System of Classification and Labelling of Chemicals</i>		

Skin Corrosion/Irritation:	Based on similar formulations, does not classify in this category.
Eye Damage/Irritation:	Based on similar formulations, does not classify in this category.
Germ Cell Mutagenicity:	Mixture does not classify under this category.
Carcinogenicity:	Mixture does not classify under this category.
Reproductive Toxicity:	Mixture does not classify under this category.
STOT-Single Exposure:	Mixture does not classify under this category.
STOT-Repeated Exposure:	Mixture does not classify under this category.
Aspiration Hazard:	Mixture does not classify under this category.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.
Aquatic:	Based on similar formulations expected Aquatic Toxicity - Low, based on OECD 201, 202, 203 + Microtox: EC ₅₀ & IC ₅₀ ≥100 mg/L. Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.
Terrestrial:	Not tested on finished formulation.

Section 12: ECOLOGICAL INFORMATION - continued

Persistence and Degradability:	Based on similar formulations, expected to be readily biodegradable under OECD 301D, and reach 100% biodegradation within 60 days.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Other Adverse Effects:	No data available.

Section 13: DISPOSAL CONSIDERATIONS

Unused or Used Liquid: May be considered hazardous in your area depending on usage and tonnage of disposal – check with local, regional, and or national regulations for appropriate methods of disposal.

Empty Containers: May be offered for recycling.

Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

Section 14: TRANSPORT INFORMATION

U.N. Number:	Not applicable
U.N. Proper Shipping Name:	Cleaning Compound, Liquid NOI
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Marine Pollutant - NO
Transport in Bulk (according to Annex II of MARPOL 73/78 and IBC Code):	Unknown.
Special precautions which user needs to be aware of/comply with, in connection with transport or conveyance either within or outside their premises:	None known.

U.S. (DOT) / Canadian TDG:	Not Regulated for shipping.	ICAO/ IATA:	Not classified as Hazardous
IMO / IDMG:	Not classified as Hazardous	ADR/RID:	Not classified as Hazardous

Section 15: REGULATORY INFORMATION

All components are listed on: TSCA and DSL Inventory.

SARA Title III: Sections 311/312 Hazard Categories – Not applicable.
Sections 313 Superfunds Amendments and Reauthorizations Act of 1986 – Not applicable.
Sections 302 – Not applicable.

Clean Air Act (CAA): Not applicable
Clean Water Act (CWA): Not applicable

State Right To Know Lists: No ingredients listed
California Proposition 65: No ingredients listed

This product has been classified as “not classifiable as hazardous” in accordance with Consumer Product Safety Commission (16 CFR Chapter 2) and labelled and packaged accordingly.

US Consumer Product Safety Commission Regulations

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). However, the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. Therefore, the requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC, and this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

Section 16: OTHER INFORMATION

Safety Data Sheet: **Simple Green® All-Purpose Cleaner Lemon Scent**

Version No. 14010-23A

Issue Date: January 1, 2023

Supersedes Date: June 2, 2021

OSHA HCS-2012 / GHS

<u>Size</u>	<u>UPC</u>	<u>Size</u>	<u>UPC</u>
2 fl. oz.	043318140136	67.6 fl. oz.	043318000416
22 fl. oz. trigger	043318140013	67.6 fl. oz.	043318140075
24 fl. oz. trigger	043318000805	67.6 fl. oz. w/ dilution bottle	043318003134
24 fl. oz. trigger	043318140020	1 gallon	043318140105
32 fl. oz. trigger	043318000690	1 gallon w/ dilution bottle	043318006197
32 fl. oz. trigger	043318140075	1 gallon w/ dilution bottle	043318480515
32 fl. oz. trigger w/ dilution bottle	043318003899		

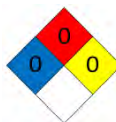
*USA items listed only. Not all items listed. USA items may not be valid for international sale.***NFPA:**

Health – None

Flammability – Non-flammable

Stability – Stable

Special - None

**Acronyms**

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

TSCA Toxic Substances Control Act

IARC

International Agency for Research on Cancer

CPSC

Consumer Product Safety Commission

DSL

Domestic Substances List

Prepared / Revised By: Sunshine Makers, Inc., Regulatory Department.**This SDS has been revised in the following sections:** Formulation Revision in section 3

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SAFETY DATA SHEET

Version 6.15
Revision Date 04/30/2025
Print Date 05/01/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Sodium chloride

Product Number : S7653
Brand : Sigma-Aldrich
CAS-No. : 7647-14-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

Other hazards

None known.

Sigma-Aldrich - S7653

Page 1 of 11

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

If inhaled : After inhalation: fresh air.

In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact : After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed : After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed : The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Protection of first-aiders : For personal protection see section 8.

Notes to physician : No data available

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : For this substance/mixture no limitations of extinguishing agents are given.

Specific hazards during fire fighting : Not combustible.

Ambient fire may liberate hazardous vapours.

Hazardous combustion products	: Hydrogen chloride gas Sodium oxides
Specific extinguishing methods	: No data available
Further information	: Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for fire-fighters	: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.
Environmental precautions	: Do not let product enter drains.
Methods and materials for containment and cleaning up	: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Further information on storage conditions	: Tightly closed. Dry.
Storage class	: 13, Non Combustible Solids
Recommended storage temperature	: Recommended storage temperature see product label.

Packaging material : Suitable material: All containers OK

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : No data available

Personal protective equipment

Respiratory protection : required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Full contact
Manufacturer : KCL 741 Dermatril® L

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Splash contact
Manufacturer : KCL 741 Dermatril® L

Remarks : This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Eye protection : Use equipment for eye protection tested and
Sigma-Aldrich - S7653

Page 4 of 11

approved under appropriate government standards
such as NIOSH (US) or EN 166(EU).
Safety glasses

Hygiene measures : Change contaminated clothing. Wash hands after
working with substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Crystalline solid

Color : colorless

Odor : odorless

Odor Threshold : Not applicable

pH : 7

Melting point/ range : 1474 °F / 801 °C

Boiling point : 2,575 °F / 1,413 °C

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable.

Flammability (liquids) : No data available

Burning rate : No data available

Upper explosion limit /
Upper flammability limit : No data available

Lower explosion limit /
Lower flammability limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : 2.16 (77 °F / 25 °C)

Density : 2.16 g/cm³ (77 °F / 25 °C)

Sigma-Aldrich - S7653

Page 5 of 11

Solubility(ies)	
Water solubility	: 317 g/l completely soluble (68 °F / 20 °C) pH: 7 - 10
Partition coefficient: n-octanol/water	: Not applicable for inorganic substances
Autoignition temperature	: Not applicable
Decomposition temperature	: 1,832 °F / 1,000 °C
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Explosive properties	: Not classified as explosive.
Oxidizing properties	: none
Surface tension	: 73.03 mN/m, 14.5 g/l, 73 °F / 23 °C
Molecular weight	: 58.44 g/mol
Particle characteristics	
Particle size	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No data available
Chemical stability	: The product is chemically stable under standard ambient conditions (room temperature) . The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	: Risk of explosion/exothermic reaction with: Alkali metals Exothermic reaction with: Lithium
Conditions to avoid	: no information available
Incompatible materials	: No data available
Hazardous decomposition	: In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Oral: No data available

Inhalation: No data available

LD50 Dermal - Rabbit - > 10,000 mg/kg

Remarks: (RTECS)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: (ECHA)

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Animal testing did not show any mutagenic effects.

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

Did not show carcinogenic effects in animal experiments.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

Did not show teratogenic effects in animal experiments.

No impairment of reproductive performance suspected.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

RTECS: VZ4725000

Vomiting, Diarrhea, Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract., Nausea
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Sigma-Aldrich - S7653

Page 8 of 11

Not regulated as a dangerous good

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National regulation

49 CFR Road

Not regulated as a dangerous good

Poison Inhalation Hazard : No

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

sodium chloride 7647-14-5

Maine Chemicals of High Concern

sodium chloride 7647-14-5

Vermont Chemicals of High Concern

sodium chloride 7647-14-5

Washington Chemicals of High Concern

sodium chloride 7647-14-5

The ingredients of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No

Sigma-Aldrich - S7653

Page 10 of 11

Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Revision Date : 04/30/2025

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

US / EN

Safety Data Sheet

Classified in accordance 29 CFR 1910.1200

1. Product Identification

Product Information: 1000000075

Product Identifier: SPRAYWAY GLASS CLEANER

Recommended Use: Cleaner

Manufacturer/Importer/Distributor Information: PLZ CORP
2651 WARRENVILLE RD, STE 300
DOWNERS GROVE, IL 60515
US
800-332-9000

Emergency Telephone: 866-836-8855

2. Hazard(s) identification

Classification
Compressed Gas

Label elements

HAZARD PICTOGRAMS



SIGNAL WORD
Warning

GHS HAZARD STATEMENTS

H280 Contains gas under pressure; may explode if heated.

GHS PRECAUTIONARY STATEMENTS

Prevention

None

Response

None

Storage

P410+P403 Protect from sunlight. Store in a well-ventilated place.

Disposal

None

Other Information

None

3. Composition/Information on Ingredients

Mixtures

<u>Chemical Identity</u>	<u>CAS Number</u>	<u>Content in Percent (%)*</u>
Ethanol	64-17-5	2.5-10
2-Butoxyethanol	111-76-2	2.5-10
Propane	74-98-6	1.0-2.5
Butane	106-97-8	1.0-2.5

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments: Other components are not hazardous or are below required disclosure limits.
The exact concentration has been withheld as a trade secret.

4. First-aid Measures

SKIN CONTACT: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

EYE CONTACT: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

INHALATION: Move to fresh air.

INGESTION: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

IMPORTANT SYMPTOMS: No data available

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: Get medical attention if symptoms occur.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Use fire-extinguishing media appropriate for surrounding materials.

UNSUITABLE EXTINGUISHING MEDIA: Do not use water jet as an extinguisher, as this will spread the fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Pressurized container may explode when exposed to heat or flame.

SPECIAL FIREFIGHTING PROCEDURES: No data available

6. Accidental Release Measures

PERSONAL PRECAUTIONS : No data available

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and Storage

HANDLING: Wear personal protective equipment.

SAFE HANDLING ADVICE: Observe good industrial hygiene practices.

STORAGE: No data available

NFPA 30B: Aerosol Level 1

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>TLV-TWA</u>	<u>TLV-STEL</u>	<u>PEL-TWA</u>	<u>PEL-CEILING</u>
Ethanol	N.E.	1000 ppm	1000 ppm	N.E.

2-Butoxyethanol	20 ppm	N.E.	50 ppm	N.E.
Propane	N.E.	N.E.	1000 ppm	N.E.
Butane	N.E.	1000 ppm	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

ENGINEERING CONTROLS: Provide adequate ventilation.

Personal Protection

EYE/FACE PROTECTION: Wear goggles/face shield.

SKIN PROTECTION: No data available

RESPIRATORY PROTECTION: Seek advice from local supervisor. In case of inadequate ventilation use suitable respirator.

HYGIENIC PRACTICES: General industrial hygiene practice.

9. Physical and Chemical Properties

Appearance:

Physical State:	Liquid
Form:	Spray Aerosol
Color:	Yellow
Odor:	Fresh
Odor Threshold:	No data available
pH:	No data available
Freeze Point, °C:	No data available
Boiling Point, °C:	78
Flash Point, °C:	-104
Flammability (solid, gas):	Non-flammable Aerosol
Evaporation Rate:	No data available
Combustibility:	Does not Support Combustion
Explosive Limits, %:	1.1 - 19.0
Vapor Pressure @20°C, PSI:	70 - 90
Vapor Density:	No data available
Relative Density:	0.979
Solubility in Water:	No data available
Partition Coefficient, n-octanol/water:	No data available
Auto-Ignition Temperature, °C:	No data available
Decomposition temperature, °C:	No data available
Kinematic Viscosity:	No data available

10. Stability and Reactivity

REACTIVITY: Not reactive under normal conditions of use.

STABILITY: Material is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: No data available

CONDITIONS TO AVOID: Avoid heat or contamination

INCOMPATIBILITY: No data available

HAZARDOUS DECOMPOSITION PRODUCTS: No data available

11. Toxicological Information

Information on Likely Routes of Exposure

SKIN CONTACT EFFECTS: May cause irritation on prolonged or repeated contact.

EYE CONTACT EFFECTS: May cause slight irritation with tearing.

INHALATION EFFECTS: Inhalation of high concentrations of mists may cause irritation of the nose throat and upper respiratory tract.

INGESTION EFFECTS: Ingestion may cause irritation of the mucous membranes, esophagus and stomach.

Carcinogenicity: contains 1 component (Ethanol) present at a level greater or equal to 0.1% that have been identified as possible carcinogenic to humans by IARC (Group 2B).

The following values are calculated based on chapter 3.1 of the GHS document. The product itself has not been tested.

ATE ORAL 15,491 mg/kg

ATE DERMAL 30,157 mg/kg

ATE INHALATION 382 mg/kg

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
64-17-5	Ethanol	10,470 mg/kg	17,100 mg/kg	124.7 mg/l
111-76-2	2-Butoxyethanol	500 mg/kg	1100 mg/kg	11 mg/l
74-98-6	Propane	5,000 mg/kg	5,000 mg/kg	100 mg/l
106-97-8	Butane	5000 mg/kg	5000 mg/kg	658 mg/L Rat

N.I. = No Information

Skin Corrosion & Irritation:

Product: No data available

Serious Eye Damage & Irritation:

Product: No data available

Respiratory or Skin Sensitization:

Product: No data available

STOT-Single Exposure:

Product: No data available

STOT-Repeated Exposure:

Product: No data available

Aspiration Hazard:

Product: No data available

Carcinogenicity:

Product: No data available

Reproductive Toxicity:

Product: No data available

Germ Cell Mutagenicity:

Product: No data available

12. Ecological Information

ECOLOGICAL INFORMATION: No data available

PERSISTENCE: No data available

BIOACCUMULATE: No data available

MOBILITY IN SOIL: No data available

OTHER ECOLOGICAL: No data available

13. Disposal Information

DISPOSAL INFORMATION: Consult with your local, regional and federal agencies for information on proper disposal.

CONTAMINATED PACKAGING : Consult with your local, regional and federal agencies for information on proper disposal.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No data available

DOT

UN Number:	UN1950
Proper Shipping Name:	AEROSOLS, NON-FLAMMABLE
Technical Name:	N/A
Hazard Class(es)	
Class:	2.2
Subsidiary Risk	N/A
Packing Group:	N/A

IATA

UN Number:	UN1950
Proper Shipping Name:	AEROSOLS, NON-FLAMMABLE
Technical Name:	N/A
Hazard Class(es)	
Class:	2.2
Subsidiary Risk:	N/A
Packing Group:	N/A

IMDG

UN Number:	UN1950
Proper Shipping Name:	AEROSOLS, NON-FLAMMABLE
Technical Name:	N/A
Hazard Class(es)	
Class:	2.2
Subsidiary Risk:	N/A
Packing Group:	N/A

The classification shown in this section may be eligible for use of an exception, such as 'Limited Quantity', per the dangerous goods regulations. The shipper of this product should consult the applicable mode's regulation for the UN number displayed above to determine if any exceptions are available and may be utilized, at the shipper's discretion.

15. Regulatory Information

CHEMICAL INVENTORY STATUS:

TSCA	On or in compliance with the inventory
DSL	All ingredients in this product are listed on the DSL or are exempt.

CALIFORNIA PROPOSITION 65 CARCINOGENS AND REPRODUCTIVE TOXINS:

No Proposition 65 chemicals present or warning required.

16. Other Information

Revision Date:	5/26/2023
Datasheet produced by:	Regulatory Department

Legend

N/A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

TLV - Threshold Limit Values (TLVs®), as established by the American Conference of Governmental Industrial Hygienists (ACGIH®)

PEL - Permissible Exposure Limit, as established by the U.S. Occupational Safety and Health Administration (OSHA), as amended

TSCA - U.S. Toxic Substance Control Act

DSL - Canada Environmental Protection Act: Domestic Substance List

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where the product use and frequency of exposure exceeds that established for the labeled consumer use.

Further Information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the manufacturer's and seller's control. Purchaser and user are responsible for determining the suitability of the product for a particular purpose, adopting precautions for the protection of property and persons, and compliance with all Federal, State, Provincial, and Local laws.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Startex Paint Thinner

Recommended use of the chemical and restrictions on use

Recommended use : Thinner

Manufacturer or supplier's details

Company : Nexeo Solutions LLC - STARTEX™
Address : 3075 Highland Pkwy Suite 200
Downers Grove, IL 60515
United States of America (USA)

Emergency telephone number:

Nexeo Solutions LLC - STARTEX™:-CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Phone: 1-855-429-2661
Regulatory Information Number: 1-855-429-2661
Email: SDSNA@univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3
Skin irritation : Category 2
Eye irritation : Category 2A
Germ cell mutagenicity : Category 1B
Carcinogenicity : Category 2
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure : Category 1 (Central nervous system)
Aspiration hazard : Category 1

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H340 May cause genetic defects.

H351 Suspected of causing cancer.

H370 Causes damage to organs.

Precautionary statements

: **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
64742-47-8 / 64742-88-7	Distillates (pet), hydrotreated light AND/OR Sol- vent naphtha (pet), med aliph.	70 - 90
8052-41-3	Stoddard solvent	20 - 30
1330-20-7	**Mixed Xylenes	1 - 5
95-63-6	**1,2,4-trimethylbenzene	1 - 5
111-84-2	**Nonane	1 - 5
100-41-4	**Ethylbenzene	0.1 - 1
91-20-3	**Naphthalene	0.1 - 1

Any Concentration shown as a range is due to batch variation.

Special Notes: : ** Other substances in the product which may present a health or environmental hazard.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire-fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Use a water spray to cool fully closed containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64742-47-8 / 64742-88-7	Distillates (pet), hydrotreated light AND/OR Solvent naphtha (pet), med aliph.	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH
		TWA	400 ppm 1,600 mg/m ³	OSHA P0
8052-41-3	Stoddard solvent	TWA	100 ppm	ACGIH
		TWA	350 mg/m ³	NIOSH REL
		C	1,800 mg/m ³	NIOSH REL
		TWA	500 ppm 2,900 mg/m ³	OSHA Z-1
		TWA	100 ppm 525 mg/m ³	OSHA P0
1330-20-7	**Mixed Xylenes	TWA	100 ppm 435 mg/m ³	OSHA Z-1
		STEL	150 ppm 655 mg/m ³	OSHA P0



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

		TWA	100 ppm 435 mg/m ³	OSHA P0
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
95-63-6	**1,2,4-trimethylbenzene	TWA	25 ppm 125 mg/m ³	NIOSH REL
		TWA	25 ppm	ACGIH
		TWA	25 ppm 125 mg/m ³	OSHA P0
111-84-2	**Nonane	TWA	200 ppm	ACGIH
		TWA	200 ppm 1,050 mg/m ³	NIOSH REL
		TWA	200 ppm 1,050 mg/m ³	OSHA P0
100-41-4	**Ethylbenzene	TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	125 ppm 545 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA Z-1
		TWA	100 ppm 435 mg/m ³	OSHA P0
		STEL	125 ppm 545 mg/m ³	OSHA P0
91-20-3	**Naphthalene	TWA	10 ppm	ACGIH
		TWA	10 ppm 50 mg/m ³	NIOSH REL
		ST	15 ppm 75 mg/m ³	NIOSH REL
		TWA	10 ppm 50 mg/m ³	OSHA Z-1
		TWA	10 ppm 50 mg/m ³	OSHA P0
		STEL	15 ppm 75 mg/m ³	OSHA P0

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, colourless
Odour	: mild, characteristic
Odour Threshold	: No data available
pH	: No data available
Freezing Point	: No data available
Boiling Point (Boiling point/boiling range)	: 158 - 198 °C (316 - 388 °F)
Flash point	: 39.44 - 45 °C (102.99 - 113 °F) Method: Tag closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.0083 PSI @ 20 °C (68 °F)
Relative vapour density	: No data available
Relative density	: 0.775 - 0.784 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: No data available
Solubility(ies) Water solubility	: negligible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 276 °C



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Thermal decomposition	: No data available
VOC	: 100.0 % / 781.27 g/l / 6.52 lb/gal
Non VOC	: 0.0 % / 0.00 g/l / 0.00 lb/gal
VOC Vapor Pressure	: 0.0083 PSI
Hazardous Air Pollutants (HAPS)	: 0.0 % / 0.00 g/l / 0.00 lb/gal

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Oxidizing agents Peroxides Reducing agents Strong bases
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute dermal toxicity : Acute toxicity estimate: 2,505 mg/kg

Components:

64742-47-8 / 64742-88-7:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Skin corrosion/irritation

Product:

Result: Irritating to skin.

Components:

64742-47-8 / 64742-88-7:

Species: Rabbit

Exposure time: 24 h

Result: Irritating to skin.

Serious eye damage/eye irritation

Product:

Result: Irritating to eyes.

Components:

64742-47-8 / 64742-88-7:

Species: Rabbit

Result: Irritating to eyes.

Respiratory or skin sensitisation

Components:

64742-47-8 / 64742-88-7:

Test Type: Buehler Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Components:

64742-47-8 / 64742-88-7:

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

8052-41-3:

Germ cell mutagenicity - Assessment : Positive result(s) from mutagenicity tests in mammals. Evidence that the substance has potential to cause mutations to germ cells

Carcinogenicity

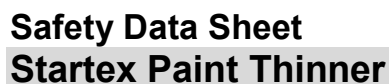
Components:

64742-47-8 / 64742-88-7:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

8052-41-3:

Carcinogenicity - Assessment : Possible human carcinogen



Revision Date: 09/01/2019

Reproductive toxicity

Teratogenicity - Assessment : Embryotoxicity classification not possible from current data.

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

May be fatal if swallowed and enters airways.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Components:

64742-47-8 / 64742-88-7:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Concentrations substantially above the TLV value may cause narcotic effects.

Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

64742-47-8 / 64742-88-7:

Toxicity to fish	: LL50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Daphnia magna (Water flea)): 1.4 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EL50 (Pseudokirchneriella subcapitata (green algae)): 1 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test
Acute aquatic toxicity- Assessment	: Toxic to aquatic life.
Chronic aquatic toxicity- Assessment	: Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

64742-47-8 / 64742-88-7:

Biodegradability	: aerobic Biodegradation: 61 % Exposure time: 28 d Remarks: Readily biodegradable

Bioaccumulative potential

Components:

1330-20-7:



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Partition coefficient: n-octanol/water : log Pow: 2.77 - 3.15

95-63-6:

Partition coefficient: n-octanol/water : Remarks: No data available

91-20-3:

Partition coefficient: n-octanol/water : log Pow: 3.4 (25 °C)
pH: 7 - 7.5

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni-var Solutions ChemCare: 1-800-909-4897

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN1263, PAINT RELATED MATERIAL, 3, III

IATA (International Air Transport Association):



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

UN1263, PAINT RELATED MATERIAL, 3, III

IMDG (International Maritime Dangerous Goods):

UN1263, PAINT RELATED MATERIAL, 3, III, Marine Pollutant (PETROLEUM DISTILLATE, HYDROTREATED LIGHT, STODDARD SOLVENT) , Flash Point:39.44 - 45 °C(102.99 - 113 °F)

Special Notes: : The flash point for this material is greater than 100 F (38 C). Therefore, in accordance with 49 CFR 173.150(f) non-bulk containers (<450L or <119 gallon capacity) of this material may be shipped as non-regulated when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : B3: Combustible Liquid
D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
**Mixed Xylenes	1330-20-7	100	2505

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Carcinogenicity
Skin corrosion or irritation
Serious eye damage or eye irritation
Germ cell mutagenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

1330-20-7	**Mixed Xylenes
95-63-6	**1,2,4-trimethylbenzene
100-41-4	**Ethylbenzene
91-20-3	**Naphthalene

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

1330-20-7	**Mixed Xylenes
100-41-4	**Ethylbenzene



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

91-20-3	**Naphthalene
98-82-8	**Cumene
108-88-3	**Toluene
71-43-2	**Benzene

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

1330-20-7	**Mixed Xylenes
100-41-4	**Ethylbenzene
91-20-3	**Naphthalene
98-82-8	**Cumene
108-88-3	**Toluene
71-43-2	**Benzene

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

1330-20-7	**Mixed Xylenes
100-41-4	**Ethylbenzene
98-82-8	**Cumene
108-88-3	**Toluene
71-43-2	**Benzene

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

1330-20-7	**Mixed Xylenes
100-41-4	**Ethylbenzene
91-20-3	**Naphthalene
108-88-3	**Toluene
71-43-2	**Benzene

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

1330-20-7	**Mixed Xylenes
100-41-4	**Ethylbenzene
91-20-3	**Naphthalene
108-88-3	**Toluene
71-43-2	**Benzene

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

8052-41-3	Stoddard solvent
1330-20-7	**Mixed Xylenes
95-63-6	**1,2,4-trimethylbenzene
111-84-2	**Nonane
71-43-2	**Benzene

Pennsylvania Right To Know

64742-47-8 /	Distillates (pet), hydrotreated light AND/OR
64742-88-7	Solvent naphtha (pet), med aliph.
8052-41-3	Stoddard solvent
1330-20-7	**Mixed Xylenes
95-63-6	**1,2,4-trimethylbenzene
111-84-2	**Nonane
100-41-4	**Ethylbenzene
91-20-3	**Naphthalene
98-82-8	**Cumene



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

108-88-3 **Toluene
71-43-2 **Benzene

California Prop 65

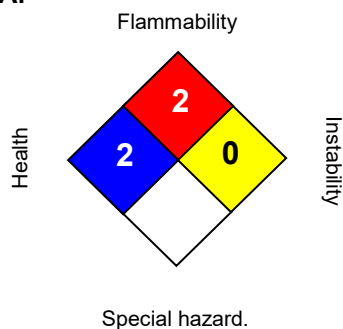
⚠ WARNING: This product can expose you to chemicals including **Ethylbenzene, **Naphthalene, **Cumene, **Benzene, which is/are known to the State of California to cause cancer, and **Toluene, **Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory
DSL : All components of this product are on the Canadian DSL
AICS : On the inventory, or in compliance with the inventory
KECI : On the inventory, or in compliance with the inventory
PICCS : On the inventory, or in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.



Safety Data Sheet Startex Paint Thinner

Version 1.5

Revision Date: 09/01/2019

Revision Date : 09/01/2019

Material number:

16130772, 16130775, 16130774, 16122036, 16067564, 16067563, 16067562, 16067561, 16067560, 16067559, 16067558, 16067557, 16056402, 16056401, 16056400, 16056399, 16056398, 16056397, 16056396, 16056395, 16056394

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

SECTION 1: Identification

1.1 Product identifier

Trade name

STP Power Steering Fluid

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

General use

1.3 Details of the supplier of the safety data sheet

Energizer Manufacturing, Inc.
25225 Detroit Rd.
Westlake OH 44145
United States

Telephone: 800-383-7323; 314-985-2000 (USA / CANADA)
e-mail: Autocare.regulatory@energizer.com
Website: <http://data.energizer.com>

1.4 Emergency telephone number

Emergency information service

FOR EMERGENCY in USA & Canada CALL +1 800
255-3924 / For International CALL +1 813 248 0585
This number is only available during the following
office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

not required

- Precautionary statements

P102

Keep out of reach of children.

- Hazardous ingredients for labelling

Distillates (petroleum), hydrotreated heavy paraffinic <3% DMSO Extract (IP346)

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Distillates (petroleum), hydrotreated heavy paraffinic <3% DMSO Extract (IP346)	CAS No 64742-54-7	50 – < 75	Acute Tox. 4 / H332 Asp. Tox. 1 / H304	

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)
this information is not available

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	not determined
Particle	not relevant (liquid)
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	0 °C at 101.3 kPa
Initial boiling point and boiling range	≥207 °C at 101.3 kPa
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	<0.1 hPa at 20 °C
Density	not determined
Vapor density	this information is not available
Relative density	Information on this property is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

Viscosity

- Kinematic viscosity	46 cSt at 40 °C
Explosive properties	none
Oxidizing properties	none
9.2 Other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

- Acute toxicity estimate (ATE)

Inhalation: vapor >2.4 mg/l/4h



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
Distillates (petroleum), hydrotreated heavy paraffinic <3% DMSO Extract (IP346)	64742-54-7	inhalation: vapor	11 mg/l/4h
Distillates (petroleum), hydrotreated heavy paraffinic <3% DMSO Extract (IP346)	64742-54-7	inhalation: dust/mist	2.18 mg/l/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	not assigned
14.2	UN proper shipping name	not assigned
14.3	Transport hazard class(es)	none
14.4	Packing group	not assigned
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6	Special precautions for user	There is no additional information.
14.7	Transport in bulk according to IMO instruments	The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

DOT

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

not assigned



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

International Maritime Dangerous Goods Code (IMDG) - Additional information

not assigned

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

not assigned

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
Distillates (petroleum), hydrotreated heavy paraffinic <3% DMSO Extract (IP346)	64742-54-7		EC Annex VI CMRs - Cat. 1B
Hydrotreated heavy petroleum distillates	64742-54-7		EC Annex VI CMRs - Cat. 1B
Solvent-Refined Heavy Paraffinic Petroleum Distillates	64741-88-4	solvents	EC Annex VI CMRs - Cat. 1B
Solvent Dewaxed Heavy Paraffinic Distillate (Petroleum)	64742-65-0	solvents	EC Annex VI CMRs - Cat. 1B

- Toxic or Hazardous Substance List (MA-TURA)

none of the ingredients are listed

- Hazardous Substances List (MN-ERTK)

none of the ingredients are listed

- Hazardous Substance List (NJ-RTK)

none of the ingredients are listed



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

- Hazardous Substance List (Chapter 323) (PA-RTK)

none of the ingredients are listed

- Hazardous Substance List (RI-RTK)

none of the ingredients are listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	1	irritation or minor reversible injury possible
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	0	material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.



Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

STP Power Steering Fluid

Version number: 1.0

Date of compilation: 2024-04-22

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Safety Data Sheet



1. Identification

Name on Label: Stops Rust Bright Coat Metallic Finish Aluminum

Product Name: STRUST +SSPR 6PK METALC ALUMINUM **Revision Date:** 3/18/2025

Product Identifier: 7715830 **Supersedes Date:** 2/21/2023

Recommended Use: Topcoat/Metallic

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

33% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS Hazard Statements

Aerosol, category 1	H222	Extremely flammable aerosol.
	H229	Pressurized container: may burst if heated.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
STOT, Single Exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, Repeated Exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS Label Precautionary Statements

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust, fumes, gas, mist, vapours, or spray.
P264	Wash thoroughly after handling.

Stops Rust Bright Coat Metallic Finish Aluminum

P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing, eye protection, and face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice.
P312	Call a POISON CENTER or physician if you feel unwell.
P321	Specific treatment (see notice on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice.
P337+P317	If eye irritation persists: Get medical help.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of contents and container in accordance with local, regional and national regulations.
GHS SDS Precautionary Statements	
P363	Wash contaminated clothing before reuse.

3. Composition / Information on Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Acetone	67-64-1	15-40	GHS02-GHS07	H225-319-332-336
Propane	74-98-6	10-30	GHS04	H280
n-Butane	106-97-8	5.0-10	GHS04	H280
n-Butyl Acetate	123-86-4	5.0-10	GHS02-GHS07	H226-336
Xylenes (o-, m-, p- Isomers)	1330-20-7	3.0-7.0	GHS02-GHS07	H226-315-319-332
Dimethyl Carbonate	616-38-6	1.0-5.0	GHS02-GHS06	H225-331
Aluminum Flake	7429-90-5	1.0-5.0	GHS02	H228-250-261
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	0.5-1.5	GHS08	H304
Hydrotreated Light Distillate	64742-47-8	0.5-1.5	GHS08	H304
Ethylbenzene	100-41-4	0.5-1.5	GHS02-GHS07- GHS08	H225-304-332-351-373
Solvent Naphtha, Light Aromatic	64742-95-6	0.1-1.0	GHS07-GHS08	H304-332
Butyl Methacrylate	97-88-1	0.1-1.0	GHS02-GHS07	H226-315-317-319-332-335
Methyl Methacrylate	80-62-6	0.1-1.0	GHS02-GHS07	H225-315-317-319-335

Actual concentrations of ingredients are withheld as trade secret.

4. First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed. Remove contact lenses, if present and easy to do. Continue rinsing.

First Aid - Skin Contact: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash contaminated clothing and decontaminate footwear before reuse.

First Aid - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Aqueous Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

Unusual Fire and Explosion Hazards: FLASH POINT IS LESS THAN -7°C (20°F). EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Fire Fighting Procedures: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): Not a combustible dust.

6. Accidental Release Measures

Steps to Be Taken If Material Is Released or Spilled: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

Handling: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid prolonged or repeated contact with skin. Do not get in eyes, on skin or clothing. Do not puncture or incinerate (burn) container, even after use.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120°F (49°C). Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Contents under pressure. Do not expose to heat or store above 120°F (49°C).

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Acetone	67-64-1	40.0	250 ppm	500 ppm	1000 ppm	N.E.
Propane	74-98-6	25.0	N.E.	N.E.	1000 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
n-Butyl Acetate	123-86-4	10.0	50 ppm	150 ppm	150 ppm	N.E.
Xylenes (o-, m-, p- Isomers)	1330-20-7	10.0	20 ppm	N.E.	100 ppm	N.E.
Dimethyl Carbonate	616-38-6	5.0	N.E.	N.E.	N.E.	N.E.
Aluminum Flake	7429-90-5	5.0	1 mg/m3	N.E.	15 mg/m3	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	5.0	100 ppm	N.E.	N.E.	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	5.0	20 ppm	N.E.	100 ppm	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	1.0	N.E.	N.E.	N.E.	N.E.
Butyl Methacrylate	97-88-1	1.0	N.E.	N.E.	N.E.	N.E.
Methyl Methacrylate	80-62-6	1.0	50 ppm	100 ppm	100 ppm	N.E.

PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 (U.S.) and/or SOR/86-304 Part XII 12.13 and CSA Standard Z180.1 (Canada) requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other Protective Equipment: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Physical State	Liquid	Decomposition Temperature, °C	N.D.
Color	Aluminum	pH	Not Determined
Odor	Solvent Like	Kinematic Viscosity	N.D.
Odor Threshold	N.E.	Solubility in Water	Slight
Freezing Point / Melting Point, °C	N.D.	Partition Coefficient, n-octanol/water	N.D.
Boiling Range, °C	-37 - 204	Vapor Pressure	N.D.
Flammability	Supports Combustion	Evaporation Rate	Faster than Ether
Lower Explosion Limit, vol%	0.6	Specific Gravity	0.724
Upper Explosion Limit, vol%	13.0	Vapor Density	Heavier than Air
Flash Point, °C	-96	Particle Characteristics	N.A.
Auto-Ignition Temperature, °C	N.D.		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

Conditions to Avoid: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition. Flammable hydrogen gas will evolve when product comes in contact with water or damp air. Heat will be generated. The amount of heat generated will depend upon the volume of material in contact. Avoid excess heat.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

11. Toxicological Information

Effects of Overexposure - Eye Contact: Can cause severe eye irritation. Causes eye and skin irritation which may lead to dermatitis with repeated exposures. Irritating, and may injure eye tissue if not removed promptly.

Effects of Overexposure - Skin Contact: Substance may cause slight skin irritation. Prolonged or repeated skin contact may cause irritation. Causes skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Prolonged or repeated contact may cause skin irritation. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Low hazard for usual industrial handling or commercial handling by trained personnel.

Effects of Overexposure - Inhalation: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled.

Stops Rust Bright Coat Metallic Finish Aluminum

Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

Effects of Overexposure - Ingestion: Substance may be harmful if swallowed.

Effects of Overexposure - Chronic Hazards: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Prolonged or repeated skin contact may cause dermatitis.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
1330-20-7	Xylenes (o-, m-, p- Isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
616-38-6	Dimethyl Carbonate	13000 mg/kg Rat	5000 mg/kg Rabbit	>5.36 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
97-88-1	Butyl Methacrylate	16000 mg/kg Rat	11300 mg/kg Rabbit	N.E.
80-62-6	Methyl Methacrylate	8420 - 10000 mg/kg Rat	5000 - 7500 mg/kg Rabbit	29.8 mg/L Rat

N.E. - Not Established

12. Ecological Information

Ecological Information: Product is a mixture of listed components. No ecotoxicity data was found for this product.

13. Disposal Considerations

Disposal: Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances. This product as supplied is a US EPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1950	1950	1950
Proper Shipping Name:	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	AEROSOLS, flammable
Hazard Class:	N.A.	2	2.1	2.1
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

SARA Section 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Xylenes (o-, m-, p- Isomers)	1330-20-7
Aluminum Flake	7429-90-5
Ethylbenzene	100-41-4
Methyl Methacrylate	80-62-6

Toxic Substances Control Act

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

California Proposition 65

WARNING:

Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 4 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 4 Instability: 0

Maximum Incremental Reactivity: 0.98

SDS REVISION DATE: 3/18/2025

REASON FOR REVISION:

Product Composition Changed
 Substance and/or Product Properties Changed in
 Section(s):
 01 - Identification
 02 - Hazard Identification
 03 - Composition / Information on Ingredients
 05 - Fire-Fighting Measures
 08 - Exposure Controls / Personal Protection
 09 - Physical & Chemical Properties
 11 - Toxicological Information
 14 - Transport Information
 15 - Regulatory Information
 16 - Other Information
 Substance Hazard Threshold % Changed
 Substance Hazardous Flag Changed
 Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Safety Data Sheet



1. Identification

Product Name:	STRUST HP 6PK GLOSS BLACK	Revision Date:	12/22/2023
Product Identifier:	7779730	Supersedes Date:	4/4/2023
Recommended Use:	Topcoat/Alkyd		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazards Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

2% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Carcinogenicity, category 1B	H350	May cause cancer.
Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.
Reproductive Toxicity, category 1B	H360	May damage fertility or the unborn child.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see notice on this label).
P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Extinguish using suitable extinguishing media.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local, regional and national regulations.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, lighting, or pouring equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.

3. Composition / Information on Ingredients**HAZARDOUS SUBSTANCES**

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Hydrotreated Light Distillate	64742-47-8	50-75	GHS08	H304
Carbon Black	1333-86-4	1.0-2.5	Not Available	Not Available
Methyl Ethyl Ketoxime	96-29-7	0.1-1.0	GHS05-GHS06-GHS07-GHS08	H302+H312-315-317-318-331-336-370-373
Cobalt 2-Ethylhexanoate	136-52-7	0.1-1.0	GHS08	H360
Zirconium 2-Ethylhexanoate	22464-99-9	0.1-1.0	GHS07-GHS08	H315+H320-360
Naphtha, Hydrotreated Heavy	64742-48-9	0.1-1.0	GHS08	H304
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07-GHS08	H225-304-332-351-373
Naphtha, Hydrotreated Heavy	64742-48-9	0.1-1.0	GHS08	H304-340-350
Zirconium Acetate	5153-24-2	<0.1	Not Available	Not Available

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed. Remove contact lenses, if present and easy to do. Continue rinsing.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash contaminated clothing and decontaminate footwear before reuse.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Aqueous Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when exposed to extreme heat due to buildup of steam. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Combustible liquid and vapor.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): Not a combustible dust.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Eliminate all ignition sources; use explosion-proof equipment. Place material in a container and dispose of according to local, provincial, state and federal regulations. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Ground and bond containers when transferring material from one vessel to another. Vapor can be ignited by static discharge. Avoid breathing fumes, vapors, or mist. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin and clothing. Avoid contact with eyes.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Hydrotreated Light Distillate	64742-47-8	55.0	N.E.	N.E.	N.E.	N.E.
Carbon Black	1333-86-4	5.0	3 mg/m3	N.E.	3.5 mg/m3	N.E.
Methyl Ethyl Ketoxime	96-29-7	1.0	10 ppm	N.E.	N.E.	N.E.
Cobalt 2-Ethylhexanoate	136-52-7	1.0	N.E.	N.E.	N.E.	N.E.
Zirconium 2-Ethylhexanoate	22464-99-9	1.0	5 mg/m3	10 mg/m3	5 mg/m3	N.E.
Naphtha, Hydrotreated Heavy	64742-48-9	1.0	N.E.	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.
Naphtha, Hydrotreated Heavy	64742-48-9	1.0	N.E.	N.E.	N.E.	N.E.
Zirconium Acetate	5153-24-2	0.1	5 mg/m3	10 mg/m3	5 mg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Specific Gravity:	0.893	pH:	N.D.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Negligible	Partition Coefficient, n-octanol/water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	0.5 - 6.6
Boiling Range, °C:	100 - 537	Flash Point, °C:	41
Flammability:	Supports Combustion	Auto-Ignition Temp., °C:	N.D.
Evaporation Rate:	Slower than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

Conditions to Avoid: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition. Avoid excess heat. Keep from freezing.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated skin contact may cause irritation. May cause skin irritation. Causes skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May damage fertility or the unborn child. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Prolonged or repeated skin contact may cause dermatitis. May cause genetic defects.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
1333-86-4	Carbon Black	>15400 mg/kg Rat	N.E.	N.E.
96-29-7	Methyl Ethyl Ketoxime	930 mg/kg Rat	1100 mg/kg Rabbit	>4.83 mg/L Rat
136-52-7	Cobalt 2-Ethylhexanoate	N.E.	>5000 mg/kg Rabbit	N.E.
64742-48-9	Naphtha, Hydrotreated Heavy	>6000 mg/kg Rat	>5000 mg/kg Rabbit	N.E.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
64742-48-9	Naphtha, Hydrotreated Heavy	>6000 mg/kg Rat	>5000 mg/kg Rabbit	N.E.

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components. No ecotoxicity data was found for this product.

13. Disposal Information

DISPOSAL: Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Not Regulated	Paint	Paint	Not Regulated
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	III	III	N.A.
Limited Quantity:	No	Yes	Yes	No

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Reproductive toxicity, Respiratory or Skin Sensitization, Germ cell mutagenicity

SARA Section 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Cobalt 2-Ethylhexanoate	136-52-7
Ethylbenzene	100-41-4

Toxic Substances Control Act

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

Stops Rust Protective Enamel Gloss Black

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

California Proposition 65

WARNING:

Cancer - www.P65Warnings.ca.gov.

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 2 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 2 Instability: 0

Volatile Organic Compounds: 485 g/L

SDS REVISION DATE: 12/22/2023

REASON FOR REVISION: Substance and/or Product Properties Changed in Section(s):
02 - Hazard Identification
03 - Composition / Information on Ingredients
05 - Fire-Fighting Measures
14 - Transport Information
15 - Regulatory Information
16 - Other Information
Substance Hazard Threshold % Changed
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : SWAK

1.2. Relevant identified uses of the substance or mixture and uses advised against

Anaerobic pipe thread sealant

1.3. Details of the supplier of the safety data sheet

Swagelok
29495 F.A. Lennon Drive
Solon, OH 44139 - United States
T 440-349-5600 - F 440-519-3304
www.swagelok.com

Supplier:

[Distributor, add your contact information](#)

1.4. Emergency telephone number

Emergency number : **Infotrac:** North America: 1-800-535-5053 International: 1-352-323-3500

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 Causes skin irritation.
Eye Irrit. 2A Causes serious eye irritation.
Skin Sens. 1 May cause an allergic skin reaction.
Carc. 2 Suspected of causing cancer.
STOT SE 3 May cause respiratory irritation.

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



GHS07

GHS08

Signal word (GHS US) : Warning

Hazard statements (GHS US) : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
Suspected of causing cancer.

Precautionary statements (GHS US)

Prevention : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing Vapors or spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace
Wear personal protective equipment.

Response

: If on skin: Wash with plenty of water
If inhaled: Remove person to fresh air and keep comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Call doctor if you feel unwell
Specific treatment (see first aid measures on this label)
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.

	If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse.
Storage	: Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	: Dispose of contents/container to meet all regulations

2.3. Other hazards

Other hazards not contributing to the classification

: Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration. This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement. Dust is not expected to be generated, however repeated or prolonged exposure to titanium dioxide dust via inhalation is suspected of causing cancer of the respiratory tract. Due to the product's final form, combustible dusts are not likely to be generated, however if small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
TITANIUM DIOXIDE	(CAS-No.) 13463-67-7	1 - 5	Carc. 2, H351
Cumene hydroperoxide	(CAS-No.) 80-15-9	<= 1	Flam. Liq. 4, H227 Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 STOT RE 2, H373 Aquatic Chronic 2, H411

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Specific treatment (see first aid measures on this label). If skin irritation or rash occurs: seek medical attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause an allergic skin reaction. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions.
- Explosion hazard : Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.
- Reactivity : This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Keep away from heat, sparks, open flames, hot surfaces. — No smoking. This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing vapor, mist or spray. Use only outdoors or in a well-ventilated area. Avoid dust formation.
- Hygiene measures : Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from children. Keep container tightly closed.

Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Strong acids, strong bases, strong oxidizers, amines, active metals, ammonia, combustible materials, reducing agents, pure oxygen, oxygen scavengers, peroxides.
Storage area	: Store in a cool, dry, ventilated area, away from incompatible substances. Keep from freezing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TITANIUM DIOXIDE (13463-67-7)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
ACGIH	Remark (ACGIH)	LRT irr; A3
OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³

8.2. Exposure controls

Appropriate engineering controls	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed.
Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: Impervious clothing.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Environmental exposure controls	: Avoid release to the environment. Avoid creating or spreading dust.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Grainy off-white paste with mild odor.
Colour	: Colourless
Odour	: Low odor
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 230 °F
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Density/ Specific Gravity	: 1.3 g/ml
Relative vapour density at 20 °C	: No data available
Solubility	: No data available
Log Pow	: No data available

Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard). UV light sources.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers, amines, active metals, ammonia, combustible materials, reducing agents, pure oxygen, oxygen scavengers, peroxides.

10.6. Hazardous decomposition products

Toxic gases may be formed, fluoride compounds, silicon oxides, carbon oxides (CO, CO₂), phenolic compounds, acrid smoke, hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

TITANIUM DIOXIDE (13463-67-7)	
LD50 oral rat	> 10000 mg/kg
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h

Cumene hydroperoxide (80-15-9)	
LD50 oral rat	382 mg/kg
LD50 dermal rabbit	0.126 ml/kg
LC50 inhalation rat (ppm)	220 ppm/4h
ATE US (oral)	382 mg/kg bodyweight
ATE US (dermal)	1100 mg/kg bodyweight
ATE US (gases)	220 ppmv/4h
ATE US (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

TITANIUM DIOXIDE (13463-67-7)	
Additional information	Titanium dioxide dust, when inhaled, has been classified by the International Agency for Research on Cancer (IARC) as an IARC Group 2B carcinogen, meaning it is possibly carcinogenic to humans. The findings of the IARC are based on the discovery that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation.

TITANIUM DIOXIDE (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : May cause respiratory irritation.

TITANIUM DIOXIDE (13463-67-7)	
Additional information	Target organs :Eyes,skin and respiratory system.

Specific target organ toxicity (repeated exposure) : Not classified
 Aspiration hazard : Not classified
 Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
 Symptoms/effects after inhalation : May cause an allergic skin reaction. May cause respiratory irritation.
 Symptoms/effects after skin contact : Causes skin irritation.
 Symptoms/effects after eye contact : Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : May cause long lasting harmful effects to aquatic life.

TITANIUM DIOXIDE (13463-67-7)	
LC50 fish 1	> 1 ml/l 96h
EC50 Daphnia 1	> 1 mg/l 48h

Cumene hydroperoxide (80-15-9)	
LC50 fish 1	3.9 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and degradability

SWAK	
Persistence and degradability	May cause long-term adverse effects in the environment.

TITANIUM DIOXIDE (13463-67-7)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

SWAK	
Bioaccumulative potential	Not established.

TITANIUM DIOXIDE (13463-67-7)	
Bioaccumulative potential	The product is practically insoluble in water and not biodegradable.

Cumene hydroperoxide (80-15-9)	
BCF fish 1	35.5

12.4. Mobility in soil

TITANIUM DIOXIDE (13463-67-7)	
Ecology - soil	No specific data.

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.
 Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to meet all regulations.

Ecology - waste materials

: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Transportation of Dangerous Goods

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
Nonanedioic acid, polymer with 1,2-propanediol (29408-67-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
Polyethylene glycol (25322-68-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
TITANIUM DIOXIDE (13463-67-7)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard
This product can expose you to Titanium Dioxide which is known to the State of California to cause cancer.	
Cumene hydroperoxide (80-15-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb
SARA Section 313 - Emission Reporting	1 %

15.2. International regulations

CANADA

No additional information available

Cumene hydroperoxide (80-15-9)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 3 - Combustible Liquid Class C - Oxidizing Material Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class E - Corrosive Material

EU-Regulations

No additional information available

Polyethylene glycol (25322-68-3)	
Listed on the EU NLP (No Longer Polymers) inventory	

National regulations

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]- (41637-38-1)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on the TCSI (Taiwan Chemical Substance Inventory)
Nonanedioic acid, polymer with 1,2-propanediol (29408-67-1)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on the TCSI (Taiwan Chemical Substance Inventory)
Polyethylene glycol (25322-68-3)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on Turkish inventory of chemical Listed on the TCSI (Taiwan Chemical Substance Inventory)
TITANIUM DIOXIDE (13463-67-7)
Listed on IARC (International Agency for Research on Cancer)
Silica, amorphous, fumed, crystalline-free (112945-52-5)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on the TCSI (Taiwan Chemical Substance Inventory)
Cumene hydroperoxide (80-15-9)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on the Canadian IDL (Ingredient Disclosure List) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

Cumene hydroperoxide (80-15-9)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

**Safety Data Sheet****Prepared in Accordance with HCS 29
C.F.R. 1910.1200****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 4708S1NL **Revision Date:** 12/05/2022
Product Name: THERMALINE 4000 **Supersedes Date:** 09/24/2020
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Monocomponent industrial coating - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
2150 Schuetz Road
St. Louis, MO USA 63146
- Regulatory / Technical Information:
Contact Carboline Technical Services at
1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - regulatory@carboline.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification**2.1 Classification of the substance or mixture**

Acute Toxicity, Inhalation, category 4
Hazardous to the aquatic environment, Chronic, category 3
Carcinogenicity, category 1A
Eye Irritation, category 2
Flammable Liquid, category 2
STOT, repeated exposure, category 1
STOT, single exposure, category 3, RTI
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

PARACHLOROBENZO TRIFLUORIDE, METHYL N-AMYL KETONE, 2-BUTOXYETHANOL, AMORPHOUS SILICA, ETHYL POLYSILICATE, MICA, MICROCRYSTALLINE SILICA

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 1A	H350-1A	May cause cancer.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P235	Keep cool.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
TITANIUM DIOXIDE	236-675-5	13463-67-7	10 - <25		
MICROCRYSTALLINE SILICA	238-878-4	14808-60-7	10 - <25	H350-372	Carc. 1A, STOT RE 1
ETHYL POLYSILICATE	234-324-0	11099-06-2	10 - <25	H319-332-335-411	Acute Tox. 4 Inhalation, Aquatic Chronic 2, Eye Irrit. 2, STOT SE 3 RTI
ETHYL ALCOHOL	200-578-6	64-17-5	10 - <25	H225	Flam. Liq. 2
MICA	310-127-6	12001-26-2	2.5 - <10	H319-335	Eye Irrit. 2, STOT SE 3 RTI
PARACHLOROBENZO TRIFLUORIDE	202-681-1	98-56-6	2.5 - <10	H226-315-317-319-335	
AMORPHOUS SILICA	231-545-4	7631-86-9	2.5 - <10	H335-372	STOT RE 1, STOT SE 3 RTI
METHYL N-AMYL KETONE	203-767-1	110-43-0	2.5 - <10	H226-302-332	Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Flam. Liq. 3
2-BUTOXYETHANOL	203-905-0	111-76-2	2.5 - <10	H302-312-315-319-332	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2

<u>CAS-No.</u>	<u>M-Factors</u>
13463-67-7	0
14808-60-7	0
11099-06-2	0
64-17-5	0
12001-26-2	0
98-56-6	0
7631-86-9	0
110-43-0	0
111-76-2	0

Remarks: CAS No 13463-67-7: Note 10

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

No Information

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
TITANIUM DIOXIDE	13463-67-7	10 mg/m3	N/E	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.025 MGM3	N/E	N/E
ETHYL POLYSILICATE	11099-06-2	N/E	N/E	N/E
ETHYL ALCOHOL	64-17-5	N/E	1000 PPM	N/E
MICA	12001-26-2	3 MGM3	N/E	N/E
PARACHLOROBENZO TRIFLUORIDE	98-56-6	N/E	N/E	N/E
AMORPHOUS SILICA	7631-86-9	10.0 MG/M3	N/E	N/E
METHYL N-AMYL KETONE	110-43-0	50 PPM	N/E	N/E
2-BUTOXYETHANOL	111-76-2	20 PPM	50 PPM	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
TITANIUM DIOXIDE	13463-67-7	15 MGM3	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.05 MGM3	N/E
ETHYL POLYSILICATE	11099-06-2	N/E	N/E
ETHYL ALCOHOL	64-17-5	1900 MGM3, 1000 PPM	N/E
MICA	12001-26-2	20. MPPCF	N/E
PARACHLOROBENZO TRIFLUORIDE	98-56-6	N/E	N/E
AMORPHOUS SILICA	7631-86-9	15.0 mg/m3	N/E
METHYL N-AMYL KETONE	110-43-0	465 MGM3, 100 PPM	N/E
2-BUTOXYETHANOL	111-76-2	120 MGM3, 25 PPM	N/E

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this

document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Viscous Liquid, Various Colors
Physical State	Liquid
Odor	Solvent
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	149 F (65 C) - 393 F (201 C)
Flash Point (°C)	61F (16C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.9 - 36.0
Vapour Pressure, mmHg	N/D
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	N/D
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	360
Specific Gravity (g/cm3)	app. 1.59

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Eye Irritation and Skin Irritation, category 2

Corrosivity: Unknown

Sensitization: Skin Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Carcinogenicity, category 1A

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

STOT-single exposure: Unknown

STOT-repeated exposure: STOT, repeated exposure, category 1

Aspiration hazard: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	Not Available	Not Available	No Information	No Information
14808-60-7	MICROCRYSTALLINE SILICA	22500 mg/kg	Not Available	Not Available	0.000	0.000
11099-06-2	ETHYL POLYSILICATE	Not Available		Not Available	0.000	0.000

64-17-5	ETHYL ALCOHOL	7060 mg/kg, oral, rat		20000 ppm/10 hrs, rat, inhalation	0.000	0.000
12001-26-2	MICA	Not Available	Not Available	Not Available	0.000	0.000
98-56-6	PARACHLOROBENZO TRIFLUORIDE	6800 mg/kg, oral, rat	3300 mg/kg, dermal, rabbit	4479 ppm	0.000	0.000
110-43-0	METHYL N-AMYL KETONE	1670 mg/kg rat oral	Not Available	2000 ppm, 4 hours	0.000	0.000
111-76-2	2-BUTOXYETHANOL	1300 mg/kg, oral, rat	2000 mg/kg, dermal, rat	450 ppm/l / 4H, rat, Inhalation	0.000	0.000

Additional Information:

Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group 1 carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Constituents may also include asbestos or non-asbestos tremolite or other silicates as impurities, and above the minimum exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	Unknown
IC50 72hr (Algae):	Unknown
LC50 96hr (fish):	Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
14808-60-7	MICROCRYSTALLINE SILICA	No information	No information	No information
11099-06-2	ETHYL POLYSILICATE	No information	No information	No information
64-17-5	ETHYL ALCOHOL	2 mg/l (Daphnia Magna)	No information	42 mg/l (fish)
12001-26-2	MICA	No information	No information	No information
98-56-6	PARACHLOROBENZO TRIFLUORIDE	2 mg/l (Daphnia magna)	No information	3 mg/l (Zebra fish)
7631-86-9	AMORPHOUS SILICA	No information	10000 mg/l (Algae)	10000 mg/l (Zebra fish)
110-43-0	METHYL N-AMYL KETONE	No information	No information	126 - 137 mg/L - Pimephales promelas
111-76-2	2-BUTOXYETHANOL	1800 mg/l (Water flea)	911 mg/l (Algae)	1474 mg/kg (Fish)

13. Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number	UN 1263
14.2 UN proper shipping name	Paint
Technical name	N/A
14.3 Transport hazard class(es)	3
Subsidiary shipping hazard	N/A
14.4 Packing group	II
14.5 Environmental hazards	Unknown
14.6 Special precautions for user	Unknown
EmS-No.:	F-E, S-E
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

15. Regulatory Information

- 15.1 Safety, health and environmental regulations/legislation for the substance or mixture:**

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>%</u>
COBALT COMPOUND	1345-16-0	4.5803693
CHROME ANTIMONY COMPOUND	68186-90-3	0.9161374
COBALT TITANATE GREEN SPINEL	68186-85-6	0.231514
HYDROGEN CHLORIDE	7647-01-0	0.0412083
METHYL ALCOHOL	67-56-1	0.006712
METHYL ISOBUTYL KETONE	108-10-1	0.0015609

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

<u>Chemical Name</u>	<u>CAS-No.</u>
PARACHLOROBENZO TRIFLUORIDE	98-56-6

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS-No.</u>
ANHYDROUS ALUMINUM SILICATE	66402-68-4

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
ANHYDROUS ALUMINUM SILICATE	66402-68-4
NICKEL ANTIMONY COMPOUND	8007-18-9
COPPER CHROMITE BLACK	68186-91-4
COBALT COMPOUND	1345-16-0
DIPROPYLENE GLYCOL METHYL ETHER	34590-94-8
IRON OXIDE	1309-37-1

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory (DSL)

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

**Safety Data Sheet****Prepared in Accordance with HCS 29
C.F.R. 1910.1200****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 0522S1NL **Revision Date:** 12/05/2022
Product Name: THINNER 2 **Supersedes Date:** 07/27/2022
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Thinner for industrial coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
2150 Schuetz Road
St. Louis, MO USA 63146
- Regulatory / Technical Information:
Contact Carboline Technical Services at
1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - regulatory@carboline.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification**2.1 Classification of the substance or mixture**

Aspiration Hazard, category 1
Eye Irritation, category 2
Flammable Liquid, category 2
Reproductive Toxicity, category 2
STOT, repeated exposure, category 2
STOT, single exposure, category 3, NE
Skin Irritation, category 2

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

METHYL ETHYL KETONE, TOLUENE

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Aspiration Hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

PRECAUTION PHRASES

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P235	Keep cool.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention
P314	Get medical advice/attention if you feel unwell.
P331	Do NOT induce vomiting.
P332+313	If skin irritation occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

Name According to EEC	EINEC No.	CAS-No.	%	Classifications

TOLUENE	203-625-9	108-88-3	75 - 100	H225-304-315-319-332-335-336 -361-370-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Eye Irrit. 2, Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 1, STOT SE 3 NE, STOT SE 3 RTI
METHYL ETHYL KETONE	201-159-0	78-93-3	10 - <25	H225-319-336	Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 NE

<u>CAS-No.</u>	<u>M-Factors</u>
108-88-3	0
78-93-3	0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

No Information

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
TOLUENE	108-88-3	20 PPM	N/E	N/E
METHYL ETHYL KETONE	78-93-3	200 PPM	300 PPM	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
TOLUENE	108-88-3	200 ppm	560 MGM3, 150 PPM
METHYL ETHYL KETONE	78-93-3	590 MGM3, 200 PPM	855 MGM3, 300 PPM

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Clear Liquid
Physical State	Liquid
Odor	Solvent
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	173 F (78 C) - 232 F (111 C)
Flash Point (°C)	24F (-4C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	1.3 - 10.1
Vapour Pressure, mmHg	36.3
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	N/D
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l: 850

Specific Gravity (g/cm3) 0.85

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Eye irritation and Skin irritation, Category 2

Corrosivity: Unknown

Sensitization: Unknown

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Category 2

STOT-single exposure: STOT, single exposure, category 3, NE

STOT-repeated exposure: STOT repeated exposure (Auditory system, eyes) Category 2

Aspiration hazard: Aspiration Hazard, category 1

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
108-88-3	TOLUENE	5000 mg/kg rat oral	12267 mg/kg, dermal, rabbit	8000 ppm/4 hrs, rat, inhalation	0.000	0.000
78-93-3	METHYL ETHYL KETONE	2194 mg/kg rat, oral	Not Available	34.5 mg/L/ 4 hour rat, inhalation	0.000	0.000

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	Unknown
IC50 72hr (Algae):	Unknown
LC50 96hr (fish):	Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
108-88-3	TOLUENE	6 mg/l (Daphnia magna)	12.5 mg/L (Algae)	5.8 mg/L (Fish)
78-93-3	METHYL ETHYL KETONE	308 mg/l (Daphnia magna)	No information	2993 mg/l (Pimephales promelas)

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1	UN number	UN1263
14.2	UN proper shipping name	Paint Related Material
	Technical name	N/A
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	N/A
14.4	Packing group	II
14.5	Environmental hazards	Unknown
14.6	Special precautions for user	Unknown
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Reproductive toxicity, Skin Corrosion or Irritation, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure), Aspiration Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>%</u>
TOLUENE	108-88-3	76.3482552

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory (DSL)

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H370	Causes damage to organs.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015
regulations & 1907/2006/EC; 2020/878

Printing date: 06/11/2024

Revision: 06/11/2024

1 Identification

- **Product identifier**
- **Trade name:** Torch Coolant 30% PG Mixture
- **Other product identifiers:** p/n 028872, 428839
- **Recommended use and restriction on use**
- **Recommended use:** Coolant/ Cutting solution
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Hypertherm

(USA)
21 Great Hollow Road,
Hanover, NH 03755 USA
+1 (603) 643-5638
www.hypertherm.com

(Europe)
Laan van Kopenhagen 100
3317 DM Dordrecht Netherlands
+31 (0) 88 497 3727 (Europe)

E-Mail (competent person) –
technical.service@Hypertherm.com
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified as hazardous according to the CLP regulation.
- **Classification according to the Globally Harmonized System (GHS)**
The product is not classified as hazardous.
- **Label elements**
GHS label elements This product does not have a classification according to the GHS regulation.
Regulation (EC) No 1272/2008 label elements: This product does not have a classification according to the CLP regulation.
- **Hazard pictograms:** Not regulated.
- **Signal word:** Not regulated.
- **Hazard statements:** Not regulated.
- **Precautionary statements:** Not regulated.
- **Additional information:** None
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures

· Components:

57-55-6	Propylene Glycol	25-50%

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 1)

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Rinse with warm water.
If skin irritation is experienced, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Gastric or intestinal disorders when ingested.
- **Indication of any immediate medical attention and special treatment needed:**
No relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture** No relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information:** Larger quantities of firefighting foam may be required to extinguish fires involving propylene glycol as propylene glycol may degrade foam performance.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Ensure adequate ventilation.
Particular danger of slipping on leaked/spilled product.
Use personal protective equipment as required.
- **Environmental precautions:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Cont'd. on page 3)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

See Section 13 for disposal information.

(Cont'd. of page 2)

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Prevent formation of aerosols.
Avoid splashes or spray in enclosed areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
- **Incompatibilities:** Store away from incompatible materials and refer to Section 10 for incompatible material information
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

57-55-6 Propylene Glycol

WEEL (USA)	Long-term value: 10 mg/m ³
EV (Canada)	Long-term value: 155* 10** mg/m ³ , 50* ppm *vapour and aerosol;**aerosol only
WEL (Great Britain)	Long-term value: 474 mg/m ³ total vapour and particulates 10 mg/m ³ total particulates

- **Appropriate Engineering Controls:** No relevant information available.
- **Individual Protection Measures**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes.
- **Breathing equipment:**
Not required under normal conditions of use.
For spills, respiratory protection may be advisable.
- **Protection of hands:**
Gloves are advised for repeated or prolonged contact.
Wear protective gloves to handle contents of damaged or leaking units.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Eye protection:**



Safety glasses

- Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Not required under normal conditions of use.

(Cont'd. on page 4)

Safety Data Sheet

Page: 4/8

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 3)

- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.
- **Limitation and supervision of exposure into the environment** No special requirements.
- **Risk management measures** No special requirements.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form:	Liquid
Color:	Pink, Light red
Odor:	Slight.
Odor threshold:	Not determined.

· pH-value at 20 °C (68 °F):	6
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	>100 °C (>212 °F)

· Flash point:	>95 °C (>203 °F)

· Flammability (solid, gaseous):	Not applicable.

· Auto-ignition temperature:	Not determined.

· Decomposition temperature:	Not determined.

· Danger of explosion:	Product does not present an explosion hazard.

· Explosion limits

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure:	Not determined.

· Density:

Relative density at 20 °C (68 °F):	1.0 ± 0.1 g/cm ³ (8.345 ± 0.835 lbs/gal)
Vapor density:	Not determined.
Evaporation rate:	Not determined.

· Solubility in / Miscibility with

Water:	Fully miscible.

· Partition coefficient (n-octanol/water):	Not determined.

· Viscosity

Dynamic:	Not determined.
Kinematic:	Not determined.

· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.

(Cont'd. on page 5)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 4)

- **Chemical stability:** Stable
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No relevant information available.
- **Incompatible materials:** Strong oxidizers, strong acids and strong bases.
- **Hazardous decomposition products:** Carbon Monoxide, Carbon Dioxide.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.

(Cont'd. on page 6)

Safety Data Sheetacc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 5)

· Additional ecological information**· General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Results of PBT and vPvB assessment**· PBT:** Not applicable.**· vPvB:** Not applicable.**· Other adverse effects:** No relevant information available.**13 Disposal considerations****· Waste treatment methods****· Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings**· Recommendation:** Disposal must be made in accordance with official regulations.**· Recommended cleansing agent:** Water.**14 Transport information****· UN-Number****· DOT, ADR, IMDG, IATA** Not regulated.**· UN proper shipping name****· DOT, ADR, IMDG, IATA** Not regulated.**· Transport hazard class(es)****· DOT, ADR, IMDG, IATA**
· Class Not regulated.**· Packing group****· DOT, ADR, IMDG, IATA** Not regulated.**· Environmental hazards****· Marine pollutant:** No**· Special precautions for user**

Not applicable.

**· Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code**

Not applicable.

(Cont'd. on page 7)

Safety Data Sheetacc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 6)

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)**· Chemicals known to cause cancer:**

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic categories**· EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 07/13/2016 / -

(Cont'd. on page 8)

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations
& 1907/2006/EC

Printing date: 09/21/2021

Revision: 09/21/2021

Trade name: Torch Coolant 30% PG Mixture

(Cont'd. of page 7)

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
LDLo: Lowest Lethal Dose Observed

· Sources

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name TRESEMME TRES TWO EXTRA HOLD HAIRSPRAY
Revision date 21-Mar-2011
CAS # Mixture
Product use Consumer Product - Hairspray
Company information ALBERTO-CULVER USA, INC.
2525 Armitage Avenue
Melrose Park, IL 60160 US
Business Phone (708) 450-3000
Emergency Phone (708) 450-3175
Shipping Emergencies CHEMTREC 800 424-9300 or 703 527-3887
Emergency Emergency Phone (708) 450-3175
Shipping Emergencies CHEMTREC 800 424-9300 or 703 527-3887
General information Business Phone (708) 450-3000

2. Hazards Identification

Emergency overview CONTENTS UNDER PRESSURE.
EXTREMELY FLAMMABLE. Will be easily ignited by heat, spark or flames.
Contact with eyes may cause irritation.

Potential short term health effects

Eyes Contact with eyes may cause irritation. Health injuries are not known or expected under normal use.

Skin Health injuries are not known or expected under normal use.

Inhalation Health injuries are not known or expected under normal use. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

Ingestion Do not ingest. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Health injuries are not known or expected under normal use.

Target organs Central nervous system. Eyes. Respiratory system. Skin.

Chronic effects Conjunctiva. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage.

Main symptoms Conjunctivitis. Rash. Irritation. Defatting of the skin. Narcosis. Behavioral changes. Decrease in motor functions.

3. Composition / Information on Ingredients

Components	CAS #	Percent
ALCOHOL DENAT.	64-17-5	< 60
Hydrofluorocarbon 152A	75-37-6	< 40
Composition comments	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	

4. First Aid Measures

First aid

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin contact Wash off with soap and water. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Ingestion Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, seek medical attention.

Notes to physician Symptoms may be delayed.

General advice Call a physician if symptoms develop or persist. If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Unusual fire & explosion hazards

Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard. Containers may explode when heated.

Suitable extinguishing media

Small Fires: Dry chemical, CO₂, water spray or regular foam.

Fire fighting equipment/instructions

Large Fires: Water spray, fog or regular foam.

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Move containers from fire area if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in flame. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire.

Special protective equipment for fire-fighters

Structural firefighters protective clothing will only provide limited protection.

Specific methods

In the event of fire and/or explosion do not breathe fumes.

Flash point

< -58 °F (< -50 °C) Estimated from Propellant

Auto-ignition temperature

384.8 °F (196 °C) estimated

6. Accidental Release Measures

Containment procedures

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Personal precautions

Ventilate closed spaces before entering. Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep out of low areas. Stay upwind.

Methods for cleaning up

Large Spills: Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling

Do not handle or store near an open flame, heat or other sources of ignition. Vapors may form explosive mixtures with air. All equipment used when handling the product must be grounded. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking. May be ignited by open flame. Do not breathe gas/fumes/vapor/spray.

Storage

Do not handle or store near an open flame, heat or other sources of ignition. Store in cool place. Keep in a well-ventilated place. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Use care in handling/storage. Keep the container dry. Keep this material away from food, drink and animal feed. Keep out of the reach of children.

Level 1 Aerosol

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	CAS #	Type	Value	Form
ALCOHOL DENAT.	64-17-5	STEL	1000 ppm	

U.S. - OSHA

Components	CAS #	Type	Value	Form
ALCOHOL DENAT.	64-17-5	PEL	1000 ppm 1900 mg/m ³	

Personal protective equipment

Respiratory protection

No personal respiratory protective equipment normally required. Applicable for industrial settings only. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection	Not normally needed. Applicable for industrial settings only. Protective gloves.
Eye protection	Avoid contact with eyes. Applicable for industrial settings only. Wear chemical goggles.
Skin and body protection	Not normally needed. Applicable for industrial settings only. Use personal protective equipment as required.
Engineering measures to reduce exposure	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment if high dust/air concentrations are possible. Use explosion-proof ventilation equipment.
Hygiene measures	Avoid contact with eyes. When using do not smoke. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Boiling point	-13 °F (-25 °C) Estimated from Propellant
Form	Aerosol.
Odor	To Match Standard
Vapor pressure	52 - 60 psi 70 Degrees F
VOC	54.7098 %

10. Chemical Stability & Reactivity Information

Stability	Risk of explosion. Risk of ignition.
Incompatibility	Acids. Amines. Isocyanates. Strong oxidizing agents.

11. Toxicological Information

Acute toxicity

Acute Inhalation: LC 50

ALCOHOL DENAT.	64-17-5	Rat 20000 mg/l 10 h
ALCOHOL DENAT.	64-17-5	Mouse 0.039 mg/l 4 h

Acute Oral: LD 50

ALCOHOL DENAT.	64-17-5	Rat 17.8 g/kg
ALCOHOL DENAT.	64-17-5	Rat 7060 mg/kg
ALCOHOL DENAT.	64-17-5	Rat 11.5 g/kg
ALCOHOL DENAT.	64-17-5	Rat 6.2 g/kg
ALCOHOL DENAT.	64-17-5	Guinea pig 5.6 g/kg
ALCOHOL DENAT.	64-17-5	Dog 5.5 g/kg
ALCOHOL DENAT.	64-17-5	Mouse 3450 mg/kg
ALCOHOL DENAT.	64-17-5	Rat 10.6 g/kg
ALCOHOL DENAT.	64-17-5	Rat 9.9 g/kg

Acute Toxicity other routes: LD 50

ALCOHOL DENAT.	64-17-5	Mouse 933 mg/kg Intraperitoneal
ALCOHOL DENAT.	64-17-5	Rat 3750 mg/kg Intraperitoneal
ALCOHOL DENAT.	64-17-5	Rat 1440 mg/kg Intravenous
ALCOHOL DENAT.	64-17-5	Mouse 8285 mg/kg Subcutaneous
ALCOHOL DENAT.	64-17-5	Mouse 1973 mg/kg Intravenous

Toxicology data for the preparation

Local effects	Contact may irritate or burn eyes.

Carcinogenicity

US ACGIH Threshold Limit Values: A3 carcinogen

ALCOHOL DENAT.	64-17-5	A3 Confirmed animal carcinogen with unknown relevance to humans.

Reproductivity	Possible reproductive hazard.

Chronic toxicity	Prolonged exposure may cause chronic effects.

Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicity

This material is not expected to be harmful to aquatic life. Components of this product have been identified as having potential environmental concerns.

Invertebrate Toxicity: EC 50

ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 1.58 mg/l 24 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 100 mg/l 24 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 100 mg/l 4 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 100 mg/l 2 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 10000 mg/l 24 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 10000 mg/l 48 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) 7.7 - 11.2 mg/l 48 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia obtusa) 10100 - 11200 mg/l 48 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia obtusa) 12300 - 13400 mg/l 24 h Static Intoxication
ALCOHOL DENAT.	64-17-5	Water flea (Daphnia magna) > 100 mg/l 6 h Static Intoxication

Micro-organisms Toxicity: LC 50

ALCOHOL DENAT.	64-17-5	Turbellarian, flatworm (Dugesia tigrina) > 100 mg/l 96 h Static Mortality

Persistence and degradability Not available.

13. Disposal Considerations

Waste codes

D001: Waste Flammable material with a flash point <140 F

Disposal instructions

Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in an approved incinerator.

14. Transport Information

Department of Transportation (DOT) Requirements

<= 1L (33.8 Fl. Oz)

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None
ERG number	126

Department of Transportation (DOT) Requirements

> 1L (0.3 Gal)

Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	UN1950
Additional information:	
Special provisions	153, N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None
ERG number	126



IATA

<= 0.5L (16.9 Fl. Oz)

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	9
UN number	8000
Packaging instructions	910



IATA

> 0.5L (16.9 Fl. Oz)

Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	UN1950
Additional information:	
Packaging exceptions	306
Labels required	2.1



IMDG

Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	UN1950
Additional information:	
Packaging exceptions	306
Labels required	2.1



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

HMIS ratings

Health: 1
Flammability: 4
Physical hazard: 1

NFPA ratings

Health: 1
Flammability: 4
Instability: 1

International regulations

The product is classified and labelled in accordance with EC directives or respective national laws.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (CCS)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Korean Inventory of Chemicals (KICS)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations**US - New Jersey Community RTK (EHS Survey): Reportable threshold**

Hydrofluorocarbon 152A 75-37-6 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

ALCOHOL DENAT. 64-17-5 Listed.

16. Other Information**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Recommended use

Consumer Product - Hairspray

Issue date

21-Mar-2011



SAFETY DATA SHEET

1. Identification

Product identifier	UNLEADED GASOLINE
Other means of identification	
SDS number	002-GHS
Synonyms	Regular/Premium/Midgrade - Unleaded Gasoline, RFG - Reformulated Unleaded Gasoline, Conventional Unleaded Gasoline, Oxygenated Unleaded Gasoline, Non-Oxygenated Unleaded Gasoline, CARB (California Air Resource Board) Unleaded Gasoline, RBOB - Reformulated Blendstock for Oxygenate Blending, CBOB - Conventional Blendstock for Oxygenate Blending, Petrol, Motor Fuel. See section 16 for complete information.
Recommended use	Motor Fuel Motor fuels.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593 CorpHSE@valero.com
General Assistance	Industrial Hygienist
E-Mail	24 Hour Emergency 866-565-5220
Contact Person	1-800-424-9300 (CHEMTREC USA)
Emergency Telephone	

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 1
Health hazards	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word

Danger

Hazard statement

Extremely flammable liquid and vapor. Causes skin irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs (blood, liver, kidney) through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

Precautionary statement**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting// equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response

If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water fog for extinction. Collect spillage.

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

3. Composition/information on ingredients**Mixtures**

Chemical name	CAS number	%
Gasoline	86290-81-5	80-100
Toluene	108-88-3	0-30
Hexane (Other Isomers)	96-14-0	5-25
Xylene (o, m, p isomers)	1330-20-7	0-25
Octane (All isomers)	111-65-9	0-18.5
Ethanol	64-17-5	0-10
1,2,4, Trimethylbenzene	95-63-6	0-6
n-Heptane	142-82-5	1-5
Pentane	109-66-0	1-5
Cumene	98-82-8	0-5
Ethylbenzene	100-41-4	0-5
Benzene	71-43-2	0-4.9
n-Hexane	110-54-3	0-3
Cyclohexane	110-82-7	0-3

4. First-aid measures**Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact

Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

UNLEADED GASOLINE

913457 Version #: 03 Revision date: 23-May-2014 Print date: 23-May-2014

Prepared by 3E Company

Indication of immediate medical attention and special treatment needed

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media

Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire-fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

Specific methods

Use water spray to cool unopened containers.

General fire hazards

Extremely flammable liquid and vapor. Containers may explode when heated.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Use non-sparking tools and explosion-proof equipment.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.

Environmental precautions

Gasoline may contain oxygenated blend products (Ethanol, etc.) that are soluble in water and therefore precautions should be taken to protect surface and groundwater sources from contamination. If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Extremely flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802.

7. Handling and storage

Precautions for safe handling

Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedings. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Cumene (CAS 98-82-8)	PEL	245 mg/m3 50 ppm
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3 300 ppm
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3 100 ppm
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3 500 ppm
Octane (All isomers) (CAS 111-65-9)	PEL	2350 mg/m3 500 ppm
Pentane (CAS 109-66-0)	PEL	2950 mg/m3 1000 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
	TWA	0.5 ppm
Cumene (CAS 98-82-8)	TWA	50 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Pentane (CAS 109-66-0)	TWA	600 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	1 ppm
	TWA	0.1 ppm
Cumene (CAS 98-82-8)	TWA	245 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	TWA	1050 mg/m3
		300 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Hexane (Other Isomers) (CAS 96-14-0)	Ceiling	1800 mg/m3
		510 ppm
	TWA	350 mg/m3
		100 ppm
n-Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3
		440 ppm
	TWA	350 mg/m3
		85 ppm
n-Hexane (CAS 110-54-3)	TWA	180 mg/m3
		50 ppm
Octane (All isomers) (CAS 111-65-9)	Ceiling	1800 mg/m3
		385 ppm
	TWA	350 mg/m3
		75 ppm
Pentane (CAS 109-66-0)	Ceiling	1800 mg/m3

UNLEADED GASOLINE

913457 Version #: 03 Revision date: 23-May-2014 Print date: 23-May-2014

Prepared by 3E Company

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Toluene (CAS 108-88-3)	TWA	610 ppm
		350 mg/m ³
	STEL	120 ppm
		560 mg/m ³
Xylene (o, m, p isomers) (CAS 1330-20-7)	TWA	150 ppm
		375 mg/m ³
	STEL	100 ppm
		655 mg/m ³
	TWA	150 ppm
		435 mg/m ³
		100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	0.7 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
n-Hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis		*
	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (o, m, p isomers) (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Cumene (CAS 98-82-8)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Cumene (CAS 98-82-8)	Skin designation applies.
Toluene (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

Cumene (CAS 98-82-8)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Cumene (CAS 98-82-8)	Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Cumene (CAS 98-82-8)	Can be absorbed through the skin.

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.
Skin protection	
Hand protection	Avoid exposure - obtain special instructions before use. Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear chemical-resistant, impervious gloves. Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Light straw to red clear liquid with characteristic strong odor of gasoline.
Physical state	Liquid.
Form	Liquid.
Color	Light straw to red clear.
Odor	Characteristic Gasoline Odor (Strong).
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	44.01 °F (6.67 °C) May start to solidify at this temperature. This is based on data for the following ingredient: Cyclohexane. Weighted average: -91.9 deg C (-133.4 deg F)
Initial boiling point and boiling range	80.06 - 440.06 °F (26.7 - 226.7 °C)
Flash point	-40.0 °F (-40.0 °C) (closed cup)
Evaporation rate	10 - 11 BuAc
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.3 %
Flammability limit - upper (%)	7.1 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	60.8 - 101.3 kPa (20°C)
Vapor density	3 - 4 (Air=1)
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Very slightly soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 500 °F (> 260 °C)
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Flash point class	Flammable IA
VOC (Weight %)	100 %

10. Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	Swallowing or vomiting of the liquid may result in aspiration into the lungs.
Inhalation	In high concentrations, mists/vapors may irritate throat and respiratory system and cause coughing. May cause drowsiness or dizziness.
Skin contact	Causes skin irritation. Prolonged contact may cause dryness of the skin.
Eye contact	May cause eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.

Components	Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 3160 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 2000 mg/l, 48 Hours
<i>Oral</i>		
LD50	Rat	6 g/kg
Benzene (CAS 71-43-2)		
Acute		
<i>Oral</i>		
LD50	Rat	3306 mg/kg
Cumene (CAS 98-82-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	2000 mg/l, 7 Hours
	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	1400 mg/kg
Cyclohexane (CAS 110-82-7)		
Acute		
<i>Oral</i>		
LD50	Rat	12705 mg/kg

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	30000 mg/m3
Ethylbenzene (CAS 100-41-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Oral</i>		
LD50	Rat	5.46 g/kg
n-Heptane (CAS 142-82-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	103 mg/l, 4 Hours
n-Hexane (CAS 110-54-3)		
Acute		
<i>Oral</i>		
LD50	Rat	28710 mg/kg
Octane (All isomers) (CAS 111-65-9)		
Acute		
<i>Inhalation</i>		
LC50	Rat	118 mg/l, 4 Hours
Pentane (CAS 109-66-0)		
Acute		
<i>Inhalation</i>		
LC50	Rat	364 mg/l, 4 Hours
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	8000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2.6 g/kg
Xylene (o, m, p isomers) (CAS 1330-20-7)		
Acute		
<i>Oral</i>		
LD50	Rat	4300 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met. This substance may have a potential for sensitization which may provoke an allergic reaction among sensitive individuals.	
Germ cell mutagenicity	May cause genetic defects. In in-vitro experiments, neither benzene, toluene nor xylene changed the number of sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes. However, toluene and xylene caused a significant cell growth inhibition which was not observed with benzene in the same concentrations. In in-vivo experiments, toluene changed the number of sister-chromatid exchanges (SCEs) in human lymphocytes. Toluene may cause heritable genetic damage.	

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Gasoline (CAS 86290-81-5)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (o, m, p isomers) (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer

Reproductive toxicity	Suspected of damaging fertility or the unborn child. Benzene, xylene and toluene have demonstrated animal effects of reproductive toxicity. Animal studies of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo/fetotoxicity. Ethanol has demonstrated human effects of reproductive toxicity. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid exposure to women during early pregnancy. Avoid contact during pregnancy/while nursing.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Blood. Kidneys. Liver.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Repeated exposure of laboratory animals to high concentrations of gasoline vapors has caused kidney damage and cancer in rats and cancer in mice. Gasoline was evaluated for genetic activity in assays using microbial cells, cultured mammalian cells and rat bone marrow cells. The results were all negative so gasoline was considered nonmutagenic under these conditions. Overexposure to this product or its components has been suggested as a cause of liver abnormalities in laboratory animals and humans. Lifetime studies by the American Petroleum Institute have shown that kidney damage and kidney cancer can occur in male rats after prolonged inhalation exposures at elevated concentrations of total gasoline. Kidneys of mice and female rats were unaffected. The U.S. EPA Risk Assessment Forum has concluded that the male rat kidney tumor results are not relevant for humans. Total gasoline exposure also produced liver tumors in female mice only. The implication of these data for humans has not been determined.
Further information	Symptoms may be delayed.

12. Ecological information

Ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Components		Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)			
Aquatic			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	7.19 - 8.28 mg/l, 96 hours
Benzene (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	7.2 - 11.7 mg/l, 96 hours
Cumene (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (<i>Artemia</i> sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	2.7 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)			
Aquatic			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	3.961 - 5.181 mg/l, 96 hours
		Striped bass (<i>Morone saxatilis</i>)	8.3 mg/l, 96 hours

Components		Species	Test Results
Ethanol (CAS 64-17-5)			
Aquatic			
Algae	EC50	Freshwater algae	275 mg/l, 72 Hours
		Marine water algae	1970 mg/l
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
		Freshwater fish	11200 mg/l, 96 Hours
Invertebrate	EC50	Freshwater invertebrate	5012 mg/l, 48 Hours
		Marine water invertebrate	857 mg/l, 48 Hours
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 - 4 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4 mg/l, 96 hours
n-Heptane (CAS 142-82-5)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	4924 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	6.86 - 8.48 mg/l, 96 hours
Xylene (o, m, p isomers) (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8 mg/l, 96 Hours
Persistence and degradability	Not available.		
Bioaccumulative potential	Not available.		
Partition coefficient n-octanol / water (log Kow)			
Benzene (CAS 71-43-2)	2.13		
Cumene (CAS 98-82-8)	3.66		
Cyclohexane (CAS 110-82-7)	3.44		
Ethanol (CAS 64-17-5)	-0.31		
Ethylbenzene (CAS 100-41-4)	3.15		
Hexane (Other Isomers) (CAS 96-14-0)	3.6		
Octane (All isomers) (CAS 111-65-9)	5.18		
Pentane (CAS 109-66-0)	3.39		
Toluene (CAS 108-88-3)	2.73		
Xylene (o, m, p isomers) (CAS 1330-20-7)	3.2		
n-Heptane (CAS 142-82-5)	4.66		
n-Hexane (CAS 110-54-3)	3.9		
Mobility in soil	Not available.		
Other adverse effects	Not available.		

13. Disposal considerations

Disposal instructions	Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 °F D018: Waste Benzene

US RCRA Hazardous Waste U List: Reference

Benzene (CAS 71-43-2)	U019
Cumene (CAS 98-82-8)	U055
Cyclohexane (CAS 110-82-7)	U056
Toluene (CAS 108-88-3)	U220
Xylene (o, m, p isomers) (CAS 1330-20-7)	U239

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	139, B33, B101, T8
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Environmental hazards	Yes
ERG Code	3H
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer

Central nervous system
Blood
Aspiration
Skin
Eye
Respiratory tract irritation
Flammability

CERCLA Hazardous Substance List (40 CFR 302.4)

Benzene (CAS 71-43-2)	LISTED
Cumene (CAS 98-82-8)	LISTED
Cyclohexane (CAS 110-82-7)	LISTED
Ethanol (CAS 64-17-5)	LISTED
Ethylbenzene (CAS 100-41-4)	LISTED
Gasoline (CAS 86290-81-5)	LISTED
Hexane (Other Isomers) (CAS 96-14-0)	LISTED
n-Heptane (CAS 142-82-5)	LISTED
n-Hexane (CAS 110-54-3)	LISTED
Octane (All isomers) (CAS 111-65-9)	LISTED
Pentane (CAS 109-66-0)	LISTED
Toluene (CAS 108-88-3)	LISTED
Xylene (o, m, p isomers) (CAS 1330-20-7)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Toluene	108-88-3	0-30
Xylene (o, m, p isomers)	1330-20-7	0-25
1,2,4, Trimethylbenzene	95-63-6	0-6
Cumene	98-82-8	0-5
Ethylbenzene	100-41-4	0-5
Benzene	71-43-2	0-4.9
n-Hexane	110-54-3	0-3
Cyclohexane	110-82-7	0-3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Ethylbenzene (CAS 100-41-4)
n-Hexane (CAS 110-54-3)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Pentane (CAS 109-66-0)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3) 35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3) 594

US. Massachusetts RTK - Substance List

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Hexane (Other Isomers) (CAS 96-14-0)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. New Jersey Worker and Community Right-to-Know Act

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. Pennsylvania Worker and Community Right-to-Know Law

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethanol (CAS 64-17-5)
Ethylbenzene (CAS 100-41-4)
Gasoline (CAS 86290-81-5)
Hexane (Other Isomers) (CAS 96-14-0)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
Octane (All isomers) (CAS 111-65-9)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. Rhode Island RTK

1,2,4, Trimethylbenzene (CAS 95-63-6)
Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Cyclohexane (CAS 110-82-7)
Ethylbenzene (CAS 100-41-4)
n-Hexane (CAS 110-54-3)
Pentane (CAS 109-66-0)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Ethylbenzene (CAS 100-41-4)
Toluene (CAS 108-88-3)

International Inventories

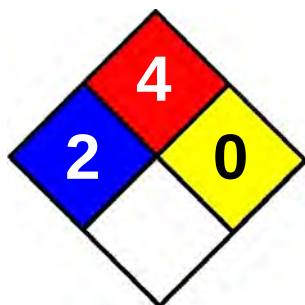
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	13-May-2013
Revision date	23-May-2014
Version #	03
Further information	HMIS® is a registered trade and service mark of the NPCA.
NFPA Ratings	



References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer	This material Safety Data Sheet (SDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.



Safety Data Sheet
according to Regulation (EC)
No. 2015/830

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 8808B1NL **Revision Date:** 06/04/2022
Product Name: URETHANE CONVERTER 8800 **Supersedes Date:** 17/05/2019
- UFI Code:** No Information
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Importer:** StonCor Europe
 9 Rue du Travail, 1400 Nivelles, Belgium
- Manufacturer:** Carboline Global Inc.
 2150 Schuetz Road
 St. Louis, MO USA 63146
- Regulatory / Technical Information:
 Contact Carboline Technical Services at
 1-800-848-4645
- Datasheet Produced by:** Beebe, Hayli - ehs@stoncor.com
- 1.4 Emergency telephone number:** CHEMTREC +1 703 5273887 (Outside US)

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Flammable Liquid, category 2	H225
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Acute Toxicity, Inhalation, category 4	H332
Respiratory Sensitizer, category 1	H334

STOT, single exposure, category 3, RTI
 STOT, single exposure, category 3, NE
 Hazardous to the aquatic environment, Chronic, category 2

H335
 H336
 H411

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

METHYL ETHYL KETONE, N-BUTYL ACETATE, HEXAMETHYLENE DIISOCYANATE, HOMOPOLYMER OF HDI, AROMATIC HYDROCARBON

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P235	Keep cool.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P391	Collect spillage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

ADDITIONAL INFORMATION

Note_P 64742-95-6	Note P : The classification as a carcinogen or mutagen need not apply; the substance, CAS 64742-95-6, contains less than 0,1 % w/w benzene

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

SECTION 3: Composition/Information On Ingredients**3.2 Mixtures****Hazardous ingredients**

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
HOMOPOLYMER OF HDI	500-060-2	28182-81-2	50 - <75	H317-332-335-411	Acute Tox. 4 Inhalation, Aquatic Chronic 2, Skin Sens. 1, STOT SE 3 RTI
METHYL ETHYL KETONE	201-159-0	78-93-3	25 - <50	H225-319-336	Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 NE
N-BUTYL ACETATE	204-658-1	123-86-4	2.5 - <10	H226-336	Flam. Liq. 3, STOT SE 3 NE
AROMATIC HYDROCARBON	265-199-0	64742-95-6	2.5 - <10	H304-315-319-332 -335-336-351-411	Acute Tox. 4 Inhalation, Aquatic Chronic 2, Asp. Tox. 1, Carc. 2, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3 NE, STOT SE 3 RTI
HEXAMETHYLENE DIISOCYANATE	212-485-8	822-06-0	0.1 - <1.0	H302-315-317-319 -331-334-335	Acute Tox. 3 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI

<u>CAS-No.</u>	<u>M-Factors</u>	<u>REACH Reg No.</u>
28182-81-2		01-2119485796-17
78-93-3		01-2119457290-43
123-86-4		
64742-95-6		
822-06-0		

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures**4.1 Description of First Aid Measures**

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.

Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Humid air and/or water will produce carbon dioxide which will pressurize the container. Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

No Information

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks. Exposure to moisture.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (EU)

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
HOMOPOLYMER OF HDI	28182-81-2				
METHYL ETHYL KETONE	78-93-3	200	300	900	600
N-BUTYL ACETATE	123-86-4	50	150	723	241
AROMATIC HYDROCARBON	64742-95-6				
HEXAMETHYLENE DIISOCYANATE	822-06-0				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
HOMOPOLYMER OF HDI	28182-81-2	
METHYL ETHYL KETONE	78-93-3	
N-BUTYL ACETATE	123-86-4	
AROMATIC HYDROCARBON	64742-95-6	
HEXAMETHYLENE DIISOCYANATE	822-06-0	N/A

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

Chemical Name:

HOMOPOLYMER OF HDI

EC No.:

500-060-2

CAS-No.:

28182-81-2

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation								
Dermal								

PNEC

PNEC's - Predicted no effect concentration

Environmental protection target	
Fresh water	0.127 mg/L
Fresh water sediments	266700 mg/kg (dry)
Marine water	0.0127 mg/l
Marine sediments	26670 mg/kg (dry)
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	53182 mg/kg (dry)
Air	

Chemical Name:

METHYL ETHYL KETONE

EC No.:

201-159-0

CAS-No.:

78-93-3

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							31 mg/kg bw/day
Inhalation				600 mg/m ³				106 mg/m ³
Dermal				1161 mg/kg bw/day				412 mg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	55.8 mg/L
Fresh water sediments	284.74 mg/kg dw
Marine water	55.8 mg/L
Marine sediments	284.7 mg/kg dw
Food chain	
Microorganisms in sewage treatment	709 mg/L
soil (agricultural)	22.5 mg/kg dw
Air	

Chemical Name:

N-BUTYL ACETATE

EC No.:

204-658-1

CAS-No.:

123-86-4

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required				300 mg/m ³	2 mg/kg bw/day - neurotoxicity-	35.7 mg/m ³	2 mg/kg bw/day
Inhalation	300 mg/m ³ (irritation (respiratory tract))	600 mg/m ³ 11 mg/kg bw/day - neurotoxicity-	300 mg/m ³	48 mg/m ³ 7 mg/kg bw/day	(irritation (respiratory tract))	300 mg/m ³ (irritation (respiratory tract))	3.4 mg/kg bw/day	12 mg/m ³
Dermal					No hazard identified	6 mg/kg bw/day - neurotoxicity		

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.18 mg/l
Fresh water sediments	0.981 mg/kg
Marine water	0.018 mg/l
Marine sediments	0.0981 mg/kg
Food chain	
Microorganisms in sewage treatment	35.6 mg/L
soil (agricultural)	0.0903 mg/kg
Air	

Chemical Name:

AROMATIC HYDROCARBON

EC No.:

265-199-0

CAS-No.:

64742-95-6

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required						11 mg/kg bw/day	32 mg/m ³
Inhalation				150 mg/m ³				11 mg/kg bw/day
Dermal				25 mg/kg bw/day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.635 mg/L
Fresh water sediments	3.29 mg/kg
Marine water	0.0635 mg/L
Marine sediments	0.329 mg/kg
Food chain	
Microorganisms in sewage treatment	100 mg/L
soil (agricultural)	0.29 mg/kg
Air	

Chemical Name:

HEXAMETHYLENE DIISOCYANATE

EC No.:

212-485-8

CAS-No.:

822-06-0

DNELs - Derived no effect level

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation	70 µg/m³ irritation (respiratory tract)	70 µg/m³ irritation (respiratory tract)	35 µg/m³ irritation (respiratory tract)	35 µg/m³ irritation (respiratory tract)				
Dermal								

PNEC

PNEC's - Predicted no effect concentration

Environmental protection target	
Fresh water	77.4 µg/L
Fresh water sediments	13.34 µg/kg sediment dw
Marine water	7.74 µg/L
Marine sediments	1.344 µg/kg sediment dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	2.6 µg/kg soil dw
Air	

SECTION 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Appearance:	Colorless, Mobile Liquid
Physical State	Liquid
Odor	Solvent
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	262 F (128 C) - 262F (128C)
Flash Point, (°C)	28F (-2C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.9 - 10.1
Vapour Pressure, mmHg	N/D
Vapour density	Heavier than Air
Relative density	Not determined
Solubility in / Miscibility with water	Reacts
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Unknown

Explosive properties Not determined

Oxidising properties Not determined

9.2 Other information

VOC Content g/l: See Part A MSDS

Specific Gravity (g/cm³) 1.00

SECTION 10: Stability and Reactivity

10.1 Reactivity

Water reactive

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks. Exposure to moisture.

10.5 Incompatible materials

Never allow product to get in contact with water during storage. Water in the container will lead to increased pressure and risk of explosion. Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Eye Irritation, category 2

Corrosivity: Unknown

Sensitization: Skin Sensitizer and Respiratory Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

STOT-single exposure: STOT, single exposure, category 3, NE & RTI

STOT-repeated exposure: Unknown

Aspiration hazard: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
28182-81-2	HOMOPOLYMER OF HDI	5000 mg/kg, oral, rat	Not Available	390 mg/m ³ , inhalation, rat	0.000	0.000
78-93-3	METHYL ETHYL KETONE	2194 mg/kg rat, oral	Not Available	34.5 mg/L/ 4 hour rat, inhalation	0.000	0.000
123-86-4	N-BUTYL ACETATE	10760 mg/kg, rat, oral	14112 mg/kg (rabbit)	21 mg/l/4/h, Inh. rat		
64742-95-6	AROMATIC HYDROCARBON	4700 mg/kg, oral, rat	Not Available	3670 ppm/8 hours, rat, inhalation	0.000	0.000
822-06-0	HEXAMETHYLENE DIISOCYANATE	710 mg/kg, oral rat	>7000 mg/kg, dermal, rat	23 ppm / 4 hrs	0.000	0.000

Additional Information:

No Information

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	Unknown
IC50 72hr (Algae):	Unknown
LC50 96hr (fish):	Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<u>CAS-No.</u>	<u>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
28182-81-2	HOMOPOLYMER OF HDI	>100 mg/l (Zebra Fish)	No information	>100 mg/l (Zebra Fish)
78-93-3	METHYL ETHYL KETONE	308 mg/l (Daphnia magna)	No information	2993 mg/l (Pimephales promelas)
123-86-4	N-BUTYL ACETATE	44 mg/l (Daphnia magna)	674.7 mg/L (Green Algae)	18 mg/l (Fathead minnow)
64742-95-6	AROMATIC HYDROCARBON	No information	No information	No information
822-06-0	HEXAMETHYLENE DIISOCYANATE	No information	No information	No information

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: No Information

Packaging Waste Code: No Information

SECTION 14: Transport Information

14.1	UN number	UN1993
14.2	UN proper shipping name	Flammable Liquid NOS
	Technical name	Methyl Ethyl Ketone, Butyl Acetate
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	N/A
14.4	Packing group	II
14.5	Environmental hazards	Unknown
14.6	Special precautions for user	Unknown
	EmS-No.:	F-E, S-E
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Unknown

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

National Regulations:

Denmark Product Registration Number:	Unknown
Danish MAL Code:	Unknown
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Unknown
Norway Product Registration Number:	Unknown
WGK Class:	No Information
Covered by Directive 2012/18/EC (Seveso III):	Not applicable
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Not applicable

Annex XIV - Authorisation List:

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List):

CAS-No. Name According to EEC

Not Applicable

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

- 01 - Identification
- 02 - Hazards Identification
- 03 - Composition/Information on Ingredients
- 08 - Exposure Controls/Personal Protection
- 11 - Toxicological Information
- 13 - Disposal Information
- 15 - Regulatory Information
- 16 - Other Information

Substance Hazard Threshold % Changed

Revision Statement(s) Changed

List of References

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark
 ESIS (The European Chemical Substances Information System), provided by the European Commission
 Joint Research Centre in Ispra, Italy
 Annex VI of the EU Council Directive 67/548/EEC
 Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m ³	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter

mg/kg	milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.



SAFETY DATA SHEET

Vaseline Petroleum Jelly – All Variants

Section 1. Identification

Product names	:	Vaseline Petroleum Jelly – All Variants Pure, Baby, Cocoa
Product type	:	Skin Protectant
UPC Code	:	305212335002, 305212326000, 305210069275
Internal product code	:	11001016, 11002034, 83142385

Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Industrial uses: Uses of substances as such or in preparations at industrial sites
Consumer uses: Private households (= general public = consumers)
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Supplier's details	:	UNILEVER 700 Sylvan Avenue Englewood Cliffs NJ 07632 USA
Emergency telephone number (with hours of operation)	:	Phone #: 800-761-3683 Monday thru Friday (8:30 AM – 5:00 PM EST) Emergency #: 800-745-9269 (24 hours) Poison Control #: 800-949-7866 (24 hours) CHEMTREC #: 800-424-9300 (24 hours, Transportation Emergencies)

Consumer Information:

For information regarding the use of this product by a consumer, please refer directly to the product label. This industrial MSDS is provided for workplace employees, per US OSHA regulations. It contains recommendations for handling of this product in an occupational, or workplace, setting.

Any first aid or warnings that are applicable to consumer use are stated directly on the product label, in accordance with all applicable government regulations.

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Keep out of reach of children.
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : None known.
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

Ingredient name	%	CAS number
Petrolatum	75 - 100	8009-03-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed**Potential acute health effects**

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.
NFPA 30B Classification	:	Not available.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

Hazardous thermal decomposition products	:	No specific data.
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** :
- Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Petrolatum	None

- Appropriate engineering controls** :
- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** :
- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** :
- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** :
- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

- Hand protection** :
- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** :
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** :
- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks

- involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Semi-solid
- Colour** : Light yellow
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : Not available
- Melting point** : Not applicable
- Boiling point** : Not available.
- Flash point** : >200°F/93.3°C
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : **Lower:** Not available.
Upper: Not available.
- Vapour pressure** : Not applicable.
- Vapour density** : Not available.
- Relative density** : 0.8475
- Solubility** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : **Dynamic:** Not available.
Kinematic: Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal

conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : Very low toxicity to humans or animals.

Irritation/Corrosion

Conclusion/Summary

Skin : The mixture is not an irritant for the skin.
Eyes : The mixture is not an irritant for eyes.
Respiratory : No inhalation irritancy studies have been performed on the mixture. Based on the composition as indicated in section 3, it is not likely that this mixture will cause irritation of the respiratory tract.

Sensitisation

Conclusion/Summary

Skin : No sensitization studies have been performed on the mixture. Based on the composition as indicated in section 3, it's not likely that the mixture will cause sensitisation by skin contact
Respiratory : No inhalation irritancy studies have been performed on the mixture. Based on the composition as indicated in section 3, it is not likely that this mixture will cause irritation of the respiratory tract.

Mutagenicity

Conclusion/Summary : Not applicable.

Carcinogenicity

Conclusion/Summary : Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Reproductive toxicity

Conclusion/Summary : Not applicable.

Teratogenicity

Conclusion/Summary : Not applicable.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure**

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Very low toxicity to humans or animals.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity**Acute toxicity estimates**

Not available.

Section 12. Ecological information

Toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Persistence and degradability

Conclusion/Summary : No known significant effects or critical hazards.

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : No known significant effects or critical hazards.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

FOR SHIPMENT IN CONSUMER PACKAGING	<u>Ground</u>	<u>Water</u>	<u>Air</u>
UN number	N/A	N/A	N/A

UN proper shipping name	Not regulated.	Not regulated.	Not regulated.
Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.
Packing group	N/A	N/A	N/A
Environmental hazards	None	None	None
Additional information	Not regulated.	Not regulated. <u>Marine pollutant:</u> No.	Not regulated.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product have been trained in the event of an accident or spillage.'

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

Section 15. Regulatory information

U.S. Federal regulations :

- United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
- United States - TSCA 4(a) - Final Test Rules:** Not listed
- United States - TSCA 4(a) - ITC Priority list:** Not listed
- United States - TSCA 4(a) - Proposed test rules:** Not listed
- United States - TSCA 4(f) - Priority risk review:** Not listed
- United States - TSCA 5(a)2 - Final significant new use rules:** Not listed
- United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed
- United States - TSCA 5(e) - Substances consent order:** Not listed
- United States - TSCA 6 - Final risk management:** Not listed
- United States - TSCA 6 - Proposed risk management:** Not listed
- United States - TSCA 8(a) - Chemical risk rules:** Not listed
- United States - TSCA 8(a) - Dioxin/Furan precursor:** Not listed
- United States - TSCA 8(a) - Chemical Data Reporting (CDR):** Not determined
- United States - TSCA 8(a) - Preliminary assessment report (PAIR):** Not listed
- United States - TSCA 8(c) - Significant adverse reaction (SAR):** Not listed
- United States - TSCA 8(d) - Health and safety studies:** Not listed
- United States - EPA Clean water act (CWA) section 307 - Priority pollutants:** Not listed
- United States - EPA Clean water act (CWA) section 311 - Hazardous substances:** Not listed
- United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances:** Not

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

listed
**United States - EPA Clean air act (CAA) section 112 -
 Accidental release prevention - Toxic substances:** Not listed
United States - Department of commerce - Precursor chemical:
 Not listed

Clean Air Act Section 112(b) : Not listed
Hazardous Air Pollutants (HAPs)
Clean Air Act Section 602 Class I : Not listed
Substances
Clean Air Act Section 602 Class : Not listed
II Substances
DEA List I Chemicals (Precursor : Not listed
Chemicals)
DEA List II Chemicals (Essential : Not listed
Chemicals)

SARA 302/304

: Not applicable.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Not available

SARA 313

None of the components are listed.

State regulations

Massachusetts : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

US California 22CCR Appendix X Substances

Not listed

California Prop. 65 : Not applicable

United States inventory (TSCA : Exempted
8b)
Canada inventory : Not determined.

International regulations

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

International lists	:	Australia inventory (AICS): Not determined. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. Japan inventory: Not determined. China inventory (IECSC): Not determined. Korea inventory: Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined.
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed
Chemical Weapons Convention List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

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Prepared by	:	Global Product Compliance Unilever Regulatory Affairs 40 Merritt Blvd Trumbull, CT 06611 USA

Key to abbreviations	:	ATE = Acute Toxicity Estimate ACGIH = American Conference of Governmental & Industrial Hygienists AH = Acute Hazard BCF = Bioconcentration Factor CAA = Clean Air Act CARB = California Air Resources Board CCR = California Code of Regulations CERCLA = Comprehensive Environmental Response, Compensation & Liability Act CFR = Code of Federal Regulations CH = Chronic Hazard

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

CWA = Clean Water Act
 DEA = Drug Enforcement Administration
 DOT = Department of Transportation
 EC = European Commission
 EPCRA = Emergency Planning and Community Right-To-Know Act
 EST = Eastern Standard Time
 F = Fire
 HAPS = Hazardous Air Pollutants
 HCS = Hazard Communication Standard
 HMIS = Hazardous Materials Information System
 HVOC = High Volatile Organic Compound
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IARC = International Agency for the Research of Cancer
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 ICAO = International Civil Aviation Organization
 IMDG = International Maritime Dangerous Goods
 IMO = International Maritime Organization
 ITC = Interagency Testing Committee (TSCA)
 KOC = Organic Carbon/Water Partition Constant
 LogPow = logarithm of the octanol/water partition coefficient
 LVOC = Low Volatile Organic Compound
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 MPPCF = Million Particles Per Cubic Foot
 N/A = Not Applicable
 NFPA = National Fire Protection Association
 NOEC = No Observable Effect Concentration
 NTP = National Toxicology Program
 OSHA = Occupation Safety & Health Administration
 PEL = Permissible Exposure Limit
 RCRA = Resource Conservation & Recovery Act
 RQ = Reportable Quantity
 RTK = Right-To-Know
 SARA = Superfund Amendments & Reauthorization Act
 STEL = Short-Term Exposure Limit
 TBD = To Be Determined
 TCC = Tagliabue Closed Cup
 TCLP = Toxicity Characteristic Leaching Procedure
 TDG = Transport of Dangerous Goods
 TLV = Threshold Limit Value
 TSCA = Toxic Substances Control Act
 TWA = Time Weighted Average
 UN = United Nations

References : Evaluation method used for mixture classification: Calculation method.
 Hazard Communication Standard 29 CFR 1910.1200 and Appendices

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the

Version: 1.0

Date of issue/Date of revision: 08/02/2015

Date of previous issue: 00/00/0000

sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



Safety Data Sheet California CARB Compliant

1 - Identification

Product Name: WD-40 Multi-Use Product Aerosol	Manufacturer: WD-40 Company
Product Use: Lubricant, Penetrant, Drives Out Moisture and Protects Surfaces from Corrosion	Address: 9715 Businesspark Avenue San Diego, California, USA 92131
Restrictions on Use: None identified	Telephone:
SDS Date of Preparation: November 13, 2024	Emergency: 1-888-324-7596
	Information: 1-888-324-7596
	Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)

2 – Hazards Identification

HCS 2024/GHS Classification:

Aerosol Category 1

Aspiration Toxicity Category 1

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Label Elements:**DANGER!**

Extremely Flammable Aerosol.

Pressurized container: may burst if heated.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Prevention

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. – No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid breathing vapors or mists.

Use only outdoors or in a well-ventilated area.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Storage

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C). Store in a well-ventilated place.

Disposal

Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	US HSC 2024 / GHS Classification
LVP Aliphatic Hydrocarbon	64742-47-8	45-50%	Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<35%	Not Hazardous
Aliphatic Hydrocarbon	64742-47-8	10 - <25%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Carbon Dioxide	124-38-9	2-3%	Simple Asphyxiant Gas Under Pressure, Compressed Gas

Note: The specific chemical identity and exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Signs and Symptoms of Exposure: Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness, and other nervous system effects. Skin contact may cause drying of the skin.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Specific Hazards Arising from the Chemical: Extremely flammable aerosol. Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate the area.

Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces, and open flames. Unplug electrical tools, motors, and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
LVP Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ TWA (Inhalable) ACGIH TLV (as Mineral oil) 5 mg/m ³ TWA OSHA PEL (as Oil mist, mineral)
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 5000 ppm TWA OSHA PEL

The Following Controls are Recommended for Normal Consumer Use of this Product

Appropriate Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Physical State:	Liquid packaged as aerosol	Color:	Light green to amber
Odor:	Mild petroleum odor	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Relative Vapor Density:	0.8 – 0.82 @ 60°F	Vapor Pressure:	95-115 PSI @ 70°F
pH:	Not Applicable	Relative Density:	
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	138°F (59°C) Tag Closed Cup (liquid)	Autoignition Temperature:	Not established
Particle Characteristics:	Not applicable	Decomposition Temperature:	Not established
Flammability:	Flammable Aerosol	Kinematic Viscosity:	2.79-2.96 cSt @ 100°F

VOC:	24.1% MIR=0.43gO3/gVOC	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.

Conditions to Avoid: Avoid heat, sparks, flames, and other sources of ignition. Do not puncture or incinerate containers.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness, and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms

Persistence and Degradability: Components are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty

(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state, and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Refer to Section 2 for the OSHA Hazard Classification.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All the components of this product are listed on the TSCA inventory.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not require a California Proposition 65 warning.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: All the ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

16 – Other Information

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: November 13, 2024

Supersedes: May 16, 2024

Revision Summary: Updates to conform to HCS 2024 – changes to sections 2, 3 and 9.

Prepared by: IHSC, LLC. Milford, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Dept.

4012200/No.0084708



Safety Data Sheet California CARB Compliant

1 - Chemical Product and Company Identification

Trade Name: WD-40 Multi-Use Product 25% VOC Bulk Liquid

Product Use: Lubricant, Penetrant, Drives Out Moisture and Protects Surfaces From Corrosion
Restrictions on Use: None identified

SDS Date of Preparation: November 13, 2024

Manufacturer: WD-40 Company
Address: 9715 Businesspark Avenue
San Diego, California, USA
92131

Telephone:
Emergency: 1-888-324-7596
Information: 1-888-324-7596
Chemical Spills: 1-800-424-9300 (Chemtrec)
1-703-527-3887 (International Calls)

2 – Hazards Identification

HCS 2024/GHS Classification:

Flammable Liquid Category 3

Aspiration Toxicity Category 1

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: The 1 gallon size product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to larger containers sold for industrial/professional use.

Label Elements:



DANGER!

Flammable liquid and vapor.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Prevention

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. – No smoking.

Keep container tightly closed.

Ground and bond containers and receiving equipment.

Use explosion-proof electrical equipment.

Use non-sparking tools.

Take action to prevent static discharge.

Avoid breathing mists or vapors.

Use only outdoors or in a well-ventilated area.

Wear eye protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish.

Storage

Store locked up.

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Disposal

Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	HCS 2024/GHS Classification
LVP Aliphatic Hydrocarbon	64742-47-8	40-50%	Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<35%	Not Hazardous
Aliphatic Hydrocarbon	64742-47-8	20-30%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: The specific chemical identity and exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Signs and Symptoms of Exposure: Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness and other nervous system effects. Skin contact may cause drying of the skin.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Specific Hazards Arising from the Chemical: Flammable liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Methods and Materials for Containment/Cleanup: Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class II Liquid.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
LVP Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ TWA (Inhalable) ACGIH TLV (as Mineral oil) 5 mg/m ³ TWA OSHA PEL (as Oil mist, mineral)
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Physical State:	Liquid	Color:	Light green to amber
Odor:	Mild petroleum odor	Flammable Limits: (Solvent Portion)	LEL: 0.8% UEL: 5.6%
Relative Vapor Density:	Greater than 1 (air=1)	Vapor Pressure:	1 psi @38°C (100°F) ASTM D323
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	322 - 388°F (161 - 198°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	138°F (59°C) Tag Closed Cup	Autoignition Temperature:	Not established
Particle Characteristics:	Not applicable	Decomposition Temperature:	Not established
Flammability:	Flammable Liquid	Kinematic Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	24.9% MIR=0.44 gO ₃ /gVOC (204 grams/liter)	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms

Persistence and Degradability: Components are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: Excepted from Hazmat (49CFR 173.150 (F)) in non-bulk packaging.

Bulk Packaging: UN1268, Petroleum Distillates, n.o.s., Combustible Liquid, PG III

IMDG Shipping Description: UN1268, Petroleum Distillates, n.o.s. 3, PG III

ICAO Shipping Description: UN1268, Petroleum Distillates, n.o.s. 3, PG III

NOTE: WD-40 Company does not test containers to assure that they meet the pressure differential and other requirements for transport by air. We do not recommend that our products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have

more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Refer to Section 2 for the OSHA Hazard Classification.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not require a California Proposition 65 warning.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

16 – Other Information

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: November 13, 2024

Supersedes: August 2, 2021

Revision Summary: Updates to conform to HCS 2024 – changes to sections 3 and 9

Prepared by: IHSC, LLC, Milford, CT, USA

Reviewed By: I. Kowalski

Regulatory Affairs Dept.

1022200/No.0084607

SAFETY DATA SHEET

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Product: Stainless Steel Cleaner & Polish- 76, 76A, 76WMA, 108, 108A

Revision Date: 07-Jan-2020

SECTION 1 – IDENTIFICATION

Product Identifier

Product Name: Stainless Steel Cleaner & Polish

Product Code: 76, 76A, 76WMA, 108, 108A

Recommended Use of the Chemical and Restrictions for Use

Recommended Use: Cleaner and polish

Restrictions for Use: Use only as directed.

Details of the Supplier

Manufacturer: Weiman Products
755 Tri-State Parkway
Gurnee, IL 60031
847-263-3500

Emergency Phone Number

24-Hour Number: 1-800-535-5053

International: 1-352-323-3500

SECTION 2 – HAZARDS IDENTIFICATION

Classification

Hazard Class	Category
Aspiration toxicity	1

Label Elements

Hazard Symbols(s):



Signal Word(s): Danger

Hazard Statement(s): May be fatal if swallowed and enters airways.

Precautionary Statement(s): If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards

4% of the mixture consists of ingredient(s) of unknown toxicity.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Wt %
White mineral oil, petroleum	8042-47-5	10-30

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4 – FIRST AID MEASURES

First Aid Measures

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Eye Contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician.

Skin: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

SAFETY DATA SHEET

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Product: Stainless Steel Cleaner & Polish- 76, 76A, 76WMA, 108, 108A

Revision Date: 07-Jan-2020

Most Important Symptoms and Effects (Acute and Delayed)

Inhalation: May cause respiratory tract irritation.

Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Ingestion: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea, or vomiting.

Skin: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physician: Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Treat for surrounding material.

Unsuitable: None known.

Specific Hazards Arising from Chemical

Products of combustion include but are not limited to: oxides of carbon.

Protective Equipment and Precautions for Firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Personal Precautions: Use personal protection equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: See Section 12 for ecological information.

Methods and Material for Containment and Cleaning Up

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Scoop up material and place in a disposal container.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Avoid contact with skin and eyes. Avoid breathing vapor or mist. Do not swallow. Handle open container with care. When using do not eat, drink, or smoke

General Hygiene Advice: Launder contaminated clothing before use. Wash hands before eating, drinking, or smoking.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Keep out of the reach of children. Keep container tightly closed.

Incompatible Materials: None known.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White mineral oil, petroleum (8042-47-5)	Not available	Not available	Not available

Appropriate Engineering Controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Individual Protection Measures

SAFETY DATA SHEET

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Product: Stainless Steel Cleaner & Polish- 76, 76A, 76WMA, 108, 108A

Revision Date: 07-Jan-2020

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin and Body Protection: Wear suitable protective clothing.

Eye/Face Protection: Safety glasses or goggles are recommended when using product.

General Work/Hygienic Practices: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White liquid emulsion

Odor: Floral

Odor threshold: Not determined

pH: 6.4

Melting point/freezing point: Not determined

Initial boiling point and boiling range: Not determined

Flash point: >93.3°C (>200°F)

Evaporation rate: Not determined

Flammability (solid, gas): Not flammable

Upper/lower flammability or explosive limits: Not determined

Vapor pressure: Not determined

Vapor density: Not determined

Relative density: 0.97

Solubility(ies): Not determined

Partition coefficient (n-octanol/water): Not determined

Auto-ignition temperature: Not determined

Decomposition temperature: Not determined

Viscosity: 10-20 cps @ 20°C (70°F)

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: None under normal use.

Conditions to avoid: Heat.

Incompatible materials: None known.

Hazardous decomposition products: May include and are not limited to: oxides of carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Likely Routes of Exposure: Inhalation, skin contact, eye contact, ingestion

Information Related to Physical, Chemical, and Toxicological Effects

See section 4 of this SDS.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity: NTP: No IARC: No OSHA: No

Numerical Measures of Toxicity

SAFETY DATA SHEET

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Product: Stainless Steel Cleaner & Polish- 76, 76A, 76WMA, 108, 108A

Revision Date: 07-Jan-2020

Product	
ATE (oral)	>2000 mg/kg, rat
ATE (dermal)	>2000 mg/kg, rabbit
ATE (inhalation)	Not available

Component Information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
White mineral oil, petroleum (8042-47-5)	5000 mg/kg (rat)	2000 mg/kg (rabbit)	>5 mg/l/4h (rat)

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not established

Persistence and degradability: Not established

Bioaccumulative potential: Not established

Mobility in soil: No additional information available

Other adverse effects: No additional information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

See section 8 of this SDS for exposure controls and personal protection.

Dispose of the product and container in accordance with all applicable local, state, and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

Note: Classification changes based on quantity, packaging, and method of shipment. See current shipping paper for most up to date shipping information.

DOT (Ground): Not regulated

IATA (Air): Not regulated

IMDG (Vessel): Not regulated

SECTION 15 – REGULATORY INFORMATION

All ingredients in this product are listed or are excluded from listing on the US Toxic Substances Act (TSCA) Chemical Substance Inventory.

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration (OSHA) applicable to this Safety Data Sheet differ from the requirements of the CPSC and as a result, this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

SECTION 16 – OTHER INFORMATION

Issue Date: 28-Jan-2015

Revision Date: 07-Jan-2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designed and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Revision date 03/20/2024

Revision Number 2

1. Identification

Product identifier

Product Name Wheel Bearing Lubricant

Other means of identification

Safety data sheet number 05031

Product Code(s) L0220-004, L0220-005, L0220-035, L0220-039, L0220-040

UN number or ID number Not regulated

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Lubriplate Lubricants Company Headquarters
129 Lockwood St.
Newark, NJ 07105
Midwest Office & Plant
1500 Oakdale Ave.
Toledo, OH 43605
419-691-2491
419-693-3806

Emergency telephone number

Emergency Telephone Chem-Tel 1-800-255 3924 (US & Canada only)
01-813-248-0585 (Outside US & Canada)

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**Hazard statements**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Grease

Physical state Solid

Odor Mineral oil

Other information

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Trade secret
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	10 - <30%	*
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	10 - <30%	*
Polybutene	9003-29-6	3 - <7%	*
Precipitated calcium carbonate	471-34-1	1 - <5%	*
zinc oxide	1314-13-2	1 - <5%	*
Antimony tris[O,O-dipropyl] tris(dithiophosphate)	15874-48-3	1 - <5%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits	The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH

Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Precipitated calcium carbonate 471-34-1	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
zinc oxide 1314-13-2	STEL: 10 mg/m ³ respirable particulate matter TWA: 2 mg/m ³ respirable particulate matter	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume
Antimony tris[O,O-dipropyl] tris(dithiophosphate) 15874-48-3	TWA: 0.5 mg/m ³ Sb	TWA: 0.5 mg/m ³ Sb (vacated) TWA: 0.5 mg/m ³ Sb	IDLH: 50 mg/m ³ Sb TWA: 0.5 mg/m ³ Sb

Appropriate engineering controls**Engineering controls**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

No special protective equipment required.

Skin and body protection

No special protective equipment required.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state	Solid
Appearance	Grease
Color	Off-white
Odor	Mineral oil
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	> 288 °C / 550.4 °F	>288°C/>550.4°F
Flash point	260 °C / 500.0 °F	None known
Evaporation rate	No data available	< 0.01 (butyl acetate = 1)
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	<0.0013 kPa @ 20°C	None known
Relative vapor density	> 5	None known
Relative density	0.96	None known
Water solubility	No data available Insoluble in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
<u>Other information</u>		
Explosive properties	Not considered to be explosive	
Oxidizing properties	Does not meet the criteria for classification as oxidising	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	May be harmful in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	5,591.20 mg/kg
ATEmix (dermal)	3,159.90 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-dust/mist)	99,999.00 mg/l
ATEmix (inhalation-vapor)	99,999.00 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Polybutene 9003-29-6	-	> 2000 mg/kg (Rat)	> 19171 mg/m ³ (Rat) 4 h
Precipitated calcium carbonate 471-34-1	= 6450 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 3 mg/L (Rat) 4 h
zinc oxide 1314-13-2	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 5700 mg/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Respiratory system, Eyes, Skin, Central Vascular System (CVS).

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Polybutene 9003-29-6	-	-	-	EC50: >100mg/L (48h, Daphnia magna)
zinc oxide 1314-13-2	-	LC50: =1.55mg/L (96h, Danio rerio)	-	-

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Polybutene 9003-29-6	7.8

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

Note: For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

Special precautions: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

DOT**Notes**

Not regulated

This product is not regulated for road transportation in accordance with 49 CFR Exceptions.

UN number or ID number

Not regulated

Proper shipping name

Not regulated

Transport hazard class(es)

Not regulated

DOT Marine Pollutant

M

IATA

UN number or ID number

Not regulated

UN3077

UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS zinc oxide, antimony tris[O,O-dipropyl] tris(dithiophosphate))

Transport hazard class(es)

9

Packing group

III

IMDG

UN number or ID number

Not regulated

UN3077

UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS zinc oxide, Zinc bis(dibutylidithiocarbamate)) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS zinc oxide, antimony tris[O,O-dipropyl] tris(dithiophosphate))

Transport hazard class(es)

9

Packing group

III

EmS-No.

F-A, S-F

Marine pollutant

Yes

Transport Label**15. Regulatory information****International Inventories**

TSCA

Complies.

DSL/NDL

Complies.

EINECS/ELINCS

Complies.

ENCS

Complies.

IECSC

Complies.

KECI

Complies.

PICCS

Complies.

AIIC

Complies.

NZIoC

Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECI - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
zinc oxide - 1314-13-2	1.0
Antimony tris[O,O-dipropyl] tris(dithiophosphate) - 15874-48-3	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
zinc oxide 1314-13-2	-	X	-	-
Antimony tris[O,O-dipropyl] tris(dithiophosphate) 15874-48-3	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	X	X	X
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	X	X	X
Precipitated calcium carbonate 471-34-1	X	X	X
zinc oxide 1314-13-2	X	X	X
Antimony tris[O,O-dipropyl] tris(dithiophosphate) 15874-48-3	X	-	X
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5	X	X	X
Distillates (petroleum),	X	X	X

hydrotreated light paraffinic 64742-55-8			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 0	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 03/20/2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



WHITE LITHIUM GREASE

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade Name WHITE LITHIUM GREASE
Product Code 16-LG
Revision Date 10/20/2020

Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Lubricant

Company Identification

The Blaster Corporation
8500 Sweet Valley Drive
Valley View, Ohio 44125

Telephone

(216) 901-5800

Fax

(216) 901-5801

Website:

www.blastercorp.com

Emergency telephone number

ChemTel 800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 2; Liquefied gas; Asp. Tox. 1

Label elements

This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Hazard Symbol



DANGER

Signal word(s)

Hazard Statement(s)

Flammable aerosol.

Pressurised container: May burst if heated.

May be fatal if swallowed and enters airways.

Precautionary Statement(s)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Other hazards

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
Intentional inhalation of gas from the container may be fatal.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification
Petroleum Distillates, Hydrotreated	30 - 50	64742-47-8	Asp. Tox. 1; H304 Flam. Liq. 4; H227
Propane	5 - 15	74-98-6	Flam. Gas 2; H221



WHITE LITHIUM GREASE

n-Butane	5 - 15	106-97-8	Flam. Gas 2; H221
Zinc Oxide	<1	1314-13-2	Aquatic Acute 1; H400 Aquatic Chronic 1; H410

Additional Information - None

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation

Remove person to fresh air and keep comfortable for breathing. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

Not normally required. If skin irritation occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Unlikely to be required but if necessary treat symptomatically. Do not give anything by mouth to an unconscious person. Seek medical treatment.

Most important symptoms and effects, both acute and delayed

IF SWALLOWED: Do not induce vomiting

Indication of any immediate medical attention and special treatment needed

Not normally required.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media
- Unsuitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray. Do not use water jet.

Special hazards arising from the substance or mixture

Flammable vapour.

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid contact with skin and eyes. Avoid breathing gas/spray.

Environmental precautions

Prevent liquid entering sewers, basements and work pits.

Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections

None

Additional Information

None



WHITE LITHIUM GREASE

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Use product in a well-ventilated area only. Do not use in confined spaces.

Conditions for safe storage, including any incompatibilities

-Storage temperature

Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Keep container tightly closed.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidizing chemicals.

Specific end use(s)

Lubricant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
C ₉ -C ₁₅ Alkanes & Cycloalkanes	Mixture	-----	1200 mg/m ³	-----	-----	-----
n-Butane	106-97-8	-----	250 ppm	-----	-----	-----
Propane	74-98-6	1000 ppm	Aspyx.#	-----	-----	#

*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method

NIOSH 1500 (hydrocarbons, B.P. 36 - 126 °C); NIOSH 1550 (Naphthas)

Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber or Butyl rubber).

Respiratory protection



Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

None known

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Aerosol spray

Color.

Colourless



WHITE LITHIUM GREASE

Odor	Fuel oil-like.
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not available.
Flash Point (°C)	-104 (-155 °F) - Propane
Evaporation Rate	Not available.
Flammability (solid, gas)	Flammable aerosol
Explosive Limit Ranges	2.1% - 9.5% v/v (Propane)
Vapor pressure (Pascal)	ca. 95 x 10 ⁴ (Propane)
Vapor Density (Air=1)	ca. 1.56 @ 0 °C (Propane)
Density (g/ml)	2.1% - 9.5% v/v (Propane)
Solubility (Water)	Not available.
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	Not available
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	<20 at 40°C
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	This product should be stored away from sources of strong heat or oxidizing chemicals.
Hazardous decomposition product(s)	Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Acute toxicity (calculated / estimated)	Oral: LD50 >5 g/kg-bw Dermal: LD50 >2 g/kg-bw Inhalation: LC50 >20 mg/l (Vapor), 4-hr. rat - May cause drowsiness or dizziness.
Irritation/Corrosivity	Repeated exposure may cause skin dryness or cracking.
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	No data
Carcinogenicity	It is unlikely to present a carcinogenic hazard to man.

	NTP	IARC	ACGIH	OSHA	NIOSH
	No.	No.	No.	No.	No.
Mutagenicity	Not available.				
Reproductive toxicity	Not available				



WHITE LITHIUM GREASE

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity:

Zinc Oxide (CAS# 1314-13-2)

Short term

LOEC (96 hour): 180 µg/L (*Danio rerio*)
LC50 (96 hour): 1.793 mg/L (*Danio rerio*)
EC50 (48 hour): 1.7 mg/L (*Daphnia magna*, mortality)
NOEC (72 hour): 50 µg/L (*Pseudokirchnerella subcapitata*)

Long Term

NOEC (30 days) 26 µg/L (*Jordanella floridae*)
NOEC (21 days): 48 µg/L (*Daphnia magna*)
NOEL (72 hour) 50 µg/L (*Pseudokirchnerella subcapitata*)

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 14: TRANSPORT INFORMATION

	<u>U.S. DOT</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
UN number	1950	1950	1950
Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class(es)	2.1	2.1	2.1
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	----	----	----

SARA 311/312 - Hazard Categories:

☒ Fire ☒ Sudden Release ☐ Reactivity ☐ Immediate (acute) ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	----	----

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
None	----	----

WHITE LITHIUM GREASE



SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: 01/06/2016

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H221: Flammable gas.
- H227: Combustible liquid.
- H304: May be fatal if swallowed and enters airways.
- H319: Causes serious eye irritation.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

Training advice: None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



SAFETY DATA SHEET

1. Identification

Product identifier	White Lithium Grease
Other means of identification	
Product Code	No. 03080 (Item# 1003341)
Recommended use	Lubricating grease
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		

Signal word

Danger

Hazard statement

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights, and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist/vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Collect spillage.

Storage

Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.

Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
1,1-difluoroethane	HFC-152a	75-37-6	30 - 40
methyl acetate		79-20-9	30 - 40
distillates (petroleum), hydrotreated heavy naphthenic		64742-52-5	10 - 20
naphtha (petroleum), hydrotreated light		64742-49-0	10 - 20
2-methylpentane		107-83-5	5 - 10
n-hexane		110-54-3	1 - 3
zinc oxide		1314-13-2	< 1
titanium dioxide		13463-67-7	< 0.3
calcium bis(dinonylnaphthalenesulphonate)		57855-77-3	< 0.2

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

**Conditions for safe storage,
including any incompatibilities**

Level 2 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
methyl acetate (CAS 79-20-9)	PEL	610 mg/m3	
		200 ppm	
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	PEL	400 mg/m3	
		100 ppm	
n-hexane (CAS 110-54-3)	PEL	1800 mg/m3	
		500 ppm	
titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
zinc oxide (CAS 1314-13-2)	PEL	5 mg/m3	Respirable fraction.
		5 mg/m3	Fume.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
titanium dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	STEL	1000 ppm	
	TWA	500 ppm	
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
methyl acetate (CAS 79-20-9)	STEL	250 ppm	
	TWA	200 ppm	
n-hexane (CAS 110-54-3)	TWA	50 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
2-methylpentane (CAS 107-83-5)	Ceiling	1800 mg/m3	
		510 ppm	
	TWA	350 mg/m3	
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)		100 ppm	
	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
methyl acetate (CAS 79-20-9)	TWA	5 mg/m3	Mist.
	STEL	760 mg/m3	
		250 ppm	
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	TWA	610 mg/m3	
		200 ppm	
	TWA	400 mg/m3	
n-hexane (CAS 110-54-3)		100 ppm	
	TWA	180 mg/m3	
		50 ppm	
zinc oxide (CAS 1314-13-2)	Ceiling	15 mg/m3	Dust.
	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		5 mg/m3	Dust.

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1,1-difluoroethane (CAS 75-37-6)	TWA	2700 mg/m3
		1000 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
n-hexane (CAS 110-54-3)	0.5 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

n-hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

n-hexane (CAS 110-54-3) Can be absorbed through the skin.

Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves such as: Neoprene.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Aerosol. Grease.
Color	White.
Odor	Solvent.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-144.4 °F (-98 °C) estimated
Initial boiling point and boiling range	123 °F (50.6 °C) estimated
Flash point	-0.00004 °F (-17.8 °C) estimated
Evaporation rate	Fast.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	1.1 % estimated
Flammability limit - upper (%)	16 % estimated
Vapor pressure	2975.2 hPa estimated
Vapor density	> 1 (air = 1)
Relative density	0.84 estimated
Solubility(ies)	
Solubility (water)	Slightly soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	489.2 °F (254 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Percent volatile	98.5 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
1,1-difluoroethane (CAS 75-37-6)		
<u>Acute</u>		
Inhalation		
LC50	Rat	383000 ppm, 2 hours
calcium bis(dinonylnaphthalenesulphonate) (CAS 57855-77-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 20 g/kg
Oral		
LD50	Rat	> 5000 mg/kg
distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
methyl acetate (CAS 79-20-9)		
<u>Acute</u>		
Oral		
LD50	Rabbit	3.7 g/kg
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	61 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
n-hexane (CAS 110-54-3)		
Acute		
Dermal		
LD50	Rabbit	> 1300 mg/kg
Oral		
LD50	Rat	15840 mg/kg
titanium dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Rabbit	> 10000 mg/kg
Inhalation		
LC50	Rabbit	> 6.8 mg/l, 4 hours
Oral		
LD50	Rat	> 10000 mg/kg
zinc oxide (CAS 1314-13-2)		
Acute		
Inhalation		
LC50	Rat	> 1.79 mg/l, 4 hours (no deaths occurred)
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Not regulated.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	Suspected of damaging fertility or the unborn child.	
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.		
Product	Species		Test Results
White Lithium Grease			
Aquatic			
Acute			
Crustacea	EC50	Daphnia	4.9855 mg/l, 48 hours estimated
Fish	LC50	Fish	4.4822 mg/l, 96 hours estimated

Components	Species		Test Results
methyl acetate (CAS 79-20-9)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	295 - 348 mg/l, 96 hours
zinc oxide (CAS 1314-13-2)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	0.098 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	1.1 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.		
Bioaccumulative potential			
Partition coefficient n-octanol / water (log Kow)			
1,1-difluoroethane			0.75
2-methylpentane			3.74
methyl acetate			0.18
n-hexane			3.9
Bioconcentration factor (BCF)			
naphtha (petroleum), hydrotreated light			10 - 25000
titanium dioxide			352
zinc oxide			60690
Mobility in soil	No data available.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal considerations

Disposal instructions	If discarded, this product is considered a RCRA ignitable waste, D001. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

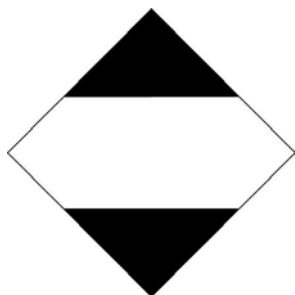
DOT	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None
IATA	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950
UN proper shipping name AEROSOLS, Limited Quantity
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not applicable.
Environmental hazards
Marine pollutant Yes, but exempt from the regulations.
EmS Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT; IMDG**IATA**

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

N-HEXANE (CAS 110-54-3)

ZINC COMPOUNDS (CAS 1314-13-2)

CERCLA Hazardous Substance List (40 CFR 302.4)

methyl acetate (CAS 79-20-9)	Listed.
n-hexane (CAS 110-54-3)	Listed.
n-pentane (CAS 109-66-0)	Listed.
zinc oxide (CAS 1314-13-2)	Listed.

CERCLA Hazardous Substances: Reportable quantity

methyl acetate (CAS 79-20-9)	100 LBS
n-hexane (CAS 110-54-3)	5000 LBS
n-pentane (CAS 109-66-0)	100 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

n-hexane (CAS 110-54-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

1,1-difluoroethane (CAS 75-37-6)

n-pentane (CAS 109-66-0)

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

methyl acetate (CAS 79-20-9) Low priority

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)
Gas under pressure
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Hazard not otherwise classified (HNOC)

SARA 302 Extremely hazardous substance

Not listed.

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
n-hexane	110-54-3	1 - 3
zinc oxide	1314-13-2	< 1

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

1,1-difluoroethane (CAS 75-37-6)
2-methylpentane (CAS 107-83-5)
methyl acetate (CAS 79-20-9)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-hexane (CAS 110-54-3)
titanium dioxide (CAS 13463-67-7)
zinc oxide (CAS 1314-13-2)

US. Massachusetts RTK - Substance List

1,1-difluoroethane (CAS 75-37-6)
2-methylpentane (CAS 107-83-5)
methyl acetate (CAS 79-20-9)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-hexane (CAS 110-54-3)
titanium dioxide (CAS 13463-67-7)
zinc oxide (CAS 1314-13-2)

US. Pennsylvania Worker and Community Right-to-Know Law

2-methylpentane (CAS 107-83-5)
methyl acetate (CAS 79-20-9)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-hexane (CAS 110-54-3)
titanium dioxide (CAS 13463-67-7)
zinc oxide (CAS 1314-13-2)

US. Rhode Island RTK

distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)
methyl acetate (CAS 79-20-9)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-hexane (CAS 110-54-3)

titanium dioxide (CAS 13463-67-7)

California Proposition 65



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

California Proposition 65 - CRT: Listed date/Carcinogenic substance

titanium dioxide (CAS 13463-67-7)

Listed: September 2, 2011

California Proposition 65 - CRT: Listed date/Male reproductive toxin

n-hexane (CAS 110-54-3)

Listed: December 15, 2017

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-hexane (CAS 110-54-3)

titanium dioxide (CAS 13463-67-7)

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 39 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as a Multi-Purpose Lubricant. This product is compliant for use in all 50 states.

VOC content (CA) 23.7 %

VOC content (OTC) 23.7 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	01-16-2015
Revision date	11-19-2018
Prepared by	Allison Yoon
Version #	04
Further information	CRC # 1750881

Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Safety Data Sheet

Date Printed: 22-Mar-2022

Version: A

1. IDENTIFICATION

Product Identifier: 347.67A
Product Name: WILKOPON HS RECOAT PRIMER RED
Other means of Identification
SDS#: 347.67A SDS
Customer and Customer Product Code:
UN/ID No.: UN 1263

Recommended use of the product and restrictions on use

Recommended Use: Protective Coating.

Details of the supplier of the safety data sheet

Supplier Address

Wilko Paint, Inc.
2727 Ohio St.
P.O. Box 4089
Wichita, KS 67204

Emergency Telephone Number

Company Phone Number: Toll Free: **1-800-658-3799**

Emergency Telephone (24 hr): Chemtrec: **1-800-424-9300**

2. HAZARDS IDENTIFICATION

Physical State: Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Flammable Liquids	Category 3

Signal Word

Danger



Hazard Statements

- Flammable liquid and vapor.
 - Harmful if swallowed.
 - Causes skin irritation.
 - Causes serious eye damage.
 - May cause respiratory irritation.
 - May cause drowsiness or dizziness.
- Other: Harmful if ingested or inhaled. See Sections 8 and 16 for more information.

Precautionary Statements - Prevention

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

This product contains an ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected carcinogens. As with any chemicals, ashtmatic sensitization can occur from single or repeated exposure. Strict observation of exposure limits is essential (See Section 8).

Precautionary Statements - Response

- If exposed or concerned: Get medical advice/attention.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary Statements - Storage

Store locked up and out of reach of children, in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	CAS No	Weight - %
MICROCRYSTALLINE SILICA (QUARTZ)	14808-60-7	10-15
CRISTOBALITE	14464-46-1	04-05
N-BUTYL ACETATE	123-86-4	10-15
METHYL AMYL KETONE	110-43-0	03-04
N-BUTYL ALCOHOL	71-36-3	< 03
PROPYLENE GLYCOL METHYL ETHER	107-98-2	< 03
ACETONE	67-64-1	< 02
XYLOL / XYLENE	1330-20-7	< 01
ODORLESS ALIPHATIC HYDROCARBON	64741-65-7	< 01

** If chemical name is "proprietary" or CAS No. is blank, and weight % is zero or listed as a range, then the specific chemical identity and/or percentage of composition is withheld as a trade secret and any exposure limits is listed in Section 8.

4. FIRST AID MEASURES**First Aid Measures**

- **General Advice** If exposed or concerned: Get medical advice/attention.
- **Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- **Skin Contact** Take off contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before reuse.
- **Inhalation** Remove to fresh air. If not breathing, give artificial respiration.
- **Ingestion** Do not induce vomiting. Call a physician.

Most important symptoms and effects May cause skin and eye irritation. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Loss of coordination.

Indication of any immediate medical attention and special treatment needed Loss of consciousness, fainting. Blurry or loss of vision.

Notes to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES**FLAMMABILITY CLASSIFICATION**

FLAMMABLE LIQUID - NFPA CLASS 3 - Flammable liquid flash point below 100 °F.

SUITABLE EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam.

SPECIAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus must be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

- Use personal protective equipment as required.
- Prevent further leakage or spillage if safe to do so.
- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

HANDLING

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Use personal protection recommended in Section 8. Avoid breathing vapors or mists.
- During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn  off, stoves, electric tools and appliances, and any other sources of ignition.
- Consult NFPA Code. Use approved Bonding and Grounding procedures. Use spark-proof tools and explosion-proof equipment.

STORAGE

- Keep container closed when not in use. Store in a dry, cool and well-ventilated place.
- Transfer only to approved containers with complete and appropriate labeling.
- Do not take internally.
- Keep out of the reach of children.
- Incompatible with strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USING THIS PRODUCT

NO person should use this product, or be in the area here it is being used, if they have chronic (long-term) lung or breathing problems or if they ever had a reaction to any one ingredients listed in the table below.

- Use only with adequate ventilation.
- Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
- Wash hands after using.
- This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 3) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 3, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

EXPOSURE LIMITS

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-BUTYL ACETATE 123-86-4	TWA: 150 ppm TWA: 710 mg/m3 STEL: 200 ppm STEL: 950 mg/m3	TWA: 150 ppm TWA: 710 mg/m3 STEL: 200 ppm	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m3
N-BUTYL ALCOHOL 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m3	TWA: 50 ppm TWA: 150 mg/m3
PROPYLENE GLYCOL METHYL ETHER 107-98-2	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm STEL: 150 ppm	
ACETONE 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm STEL: 1000 ppm	
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm TWA: 133 mg/m3	TWA: 100 ppm TWA: 465 mg/m3	TWA: 100 ppm TWA: 465 mg/m3
ODORLESS ALIPHATIC HYDROCARBON 64741-65-7 Mfg. Recommended TWA is 175 ppm Mfg. Recommended TWA is 1200 mg/m3		TWA: 500 ppm TWA: 2000 mg/m3 IVVA: 400 ppm IVVA: 1600 mg/m3	
MICROCRYSTALLINE SILICA (QUARTZ) 14808-60-7 (Carcinogen)* Mfg. Recommended TWA is 10 mg/m3	TWA: 0.025 mg/m3	TWA: 10 mg/m3 total dust	
XYLOL / XYLENE 1330-20-7	TWA: 100 ppm TWA: 435 mg/m3 STEL: 150 ppm STEL: 655 mg/m3	TWA: 100 ppm TWA: 435 mg/m3 STEL: 150 ppm STEL: 655 mg/m3	
CRISTOBALITE 14464-46-1 (Carcinogen)*	TWA: 0.025 mg/m3	TWA: 10 mg/m3 total dust	

*This ingredient(s) is designated by either IARC, NTP, ACGIH or OSHA as probable or suspected carcinogen(s).

Appropriate engineering controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear goggles or safety glasses with unperforated side shields.
Skin and Body Protection	Use solvent resistant gloves and apron or suitable protective clothing, additional use of barrier cream is recommended.
Respiratory Protection	Apply in a spray booth with ventilation that is adequate to keep the TWA TLV below the stated limits as stated in the Section 8 table, otherwise use a positive pressure air supplied respirator (TL19C NIOSH/MSHA approved). If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 8 may be used as long as the TWA TLV are below stated limits. Follow respirator manufacturer's directions for use. Wear the respirator for the duration of spraying and until all vapors and mists are gone. ALL PERSONELL IN THE AREA WHERE THIS PRODUCT IS BEING USED MUST BE EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. Wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive, when sanding or abrading dried film.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

OTHER PRECAUTIONS

If this product is to be mixed with other components before use, read and follow warning labels on all components.

Intentional misuse by deliberately concentrating and inhaling the vapors can be harmful or fatal.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid		
Appearance	Paint	Odor	Not determined
Color	See description	Odor Threshold	Not determined
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	56-250 °C / 132-482 °F		
Flash Point	27 °C / 81 °F		
Evaporation Rate	Slower Than Ether		
Flammability (Solid, Gas)	N/A - Liquid		
Upper Explosive Limit (UEL)	Not determined		
Lower Explosive Limit (LEL)	0.90 %		
Flammability Limit Vapor	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Heavier than air		
Specific Gravity	1.53		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient Auto-	Not determined		
Ignition Temperature	Not determined		
Decomposition	Not determined		
Temperature Kinematic	Not determined		
Viscosity Dynamic	Not determined		
Viscosity	Not determined		
VOC	2.80 #/gal or 336 gr/li		EPA Method 24.
VOC Actual	2.72 #/gal or 326 gr/li		Total VOC per gallon, as supplied
Wt/Gal	12.78 #/gal		

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions.

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Avoid all possible sources of ignition.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

There is no specific data available for this product.

12. ECOLOGICAL INFORMATION

There is no specific data available for this product.

CAUTION: Can be toxic to living organisms. Keep out of soil and water stream.

ECOTOXICITY EFFECTS: Harmful to aquatic life with long lasting effects.

MOBILITY: Not available

BIOACCUMULATIVE POTENTIAL: Not available

PERSISTENCE / DEGRADABILITY: Not available

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Disposal should be in accordance with applicable regional, national and local laws and regulations. Only EPA approved facility must handle incineration if this method of disposal is chosen.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations (Refer to above).

14. TRANSPORT INFORMATION

NOTE

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

IATA

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

IMDG

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

15. REGULATORY INFORMATION

There is no specific data available for this product.

16. OTHER INFORMATION

NFPA	Health Hazards 2*	Flammability 3	Instability 1	Special Hazards Not Determined
HMIS	Health Hazards *2	Flammability 3	Physical Hazards 1	Personal Protection J,X**

Chronic Hazard Star Legend
Personal Protection

*2=Chronic Health Hazard.

**J=Goggles, impermeable gloves, apron and vapor respirator required.

X=See your supervisor for guidance.

Issue Date:

Revision Date: 25-Aug-2021

Version: A

Revision Note: SDS format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

Date Printed: 5-Mar-2021

Version: S

1. IDENTIFICATION

Product Identifier: 347.67B
Product Name: WILKOPON ACTIVATOR
Other means of Identification
SDS#: 347.67B SDS
Customer and Customer Product Code:
UN/ID No.: UN 1263

Recommended use of the product and restrictions on use

Recommended Use: Protective Coating, this product is for use with Part A only.

Details of the supplier of the safety data sheet

Supplier Address

Wilko Paint, Inc.
2727 Ohio St.
P.O. Box 4089
Wichita, KS 67204

Emergency Telephone Number

Company Phone Number: Toll Free: **1-800-658-3799**

Emergency Telephone (24 hr): Chemtrec: **1-800-424-9300**

2. HAZARDS IDENTIFICATION

Physical State: Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Germ cell mutagenicity	Category 1B
Flammable Liquids	Category 3

Signal Word

Danger



Hazard Statements

- Flammable liquid and vapor.
 - Harmful if swallowed.
 - Causes skin irritation.
 - Causes serious eye damage.
 - May cause respiratory irritation.
 - May cause drowsiness or dizziness.
- Other: Harmful if ingested or inhaled. See Sections 8 and 16 for more information.

Precautionary Statements - Prevention

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

This product contains an ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected carcinogens. As with any chemicals, asthmatic sensitization can occur from single or repeated exposure. Strict observation of exposure limits is essential (See Section 8).

Precautionary Statements - Response

- If exposed or concerned: Get medical advice/attention.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary Statements - Storage

Store locked up and out of reach of children, in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	CAS No	Weight - %
MICROCRYSTALLINE SILICA (QUARTZ)	14808-60-7	20-25
CRISTOBALITE	14464-46-1	05-10
Benzyl Alcohol	100-51-6	05-10
N-BUTYL ACETATE	123-86-4	05-10
XYLOL / XYLENE	1330-20-7	04-05
PROPYLENE GLYCOL METHYL ETHER	107-98-2	03-04
TERTIARY BUTYL ACETATE	540-88-5	< 02
ACETONE	67-64-1	< 02
N-BUTYL ALCOHOL	71-36-3	< 02
ETHYLBENZENE	100-41-4	< 02
TRIETHYLENETETRAMINE	112-24-3	< .5

** If chemical name is "proprietary" or CAS No. is blank, and weight % is zero or listed as a range, then the specific chemical identity and/or percentage of composition is withheld as a trade secret and any exposure limits is listed in Section 8.

4. FIRST AID MEASURES**First Aid Measures**

- **General Advice** If exposed or concerned: Get medical advice/attention.
- **Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- **Skin Contact** Take off contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before reuse.
- **Inhalation** Remove to fresh air. If not breathing, give artificial respiration.
- **Ingestion** Do not induce vomiting. Call a physician.

Most important symptoms and effects May cause skin and eye irritation. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Loss of coordination.

Indication of any immediate medical attention and special treatment needed Loss of consciousness, fainting. Blurry or loss of vision.

Notes to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES**FLAMMABILITY CLASSIFICATION**

FLAMMABLE LIQUID - NFPA CLASS 3 - Flammable liquid flash point below 100 °F.

SUITABLE EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam.

SPECIAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.
Application to hot surfaces requires special precautions.
During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus must be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

- Use personal protective equipment as required.
- Prevent further leakage or spillage if safe to do so.
- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent and place into an appropriate container for disposal.

7. HANDLING AND STORAGE

HANDLING

- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Use personal protection recommended in Section 8. Avoid breathing vapors or mists.
- During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
- Consult NFPA Code. Use approved Bonding and Grounding procedures. Use spark-proof tools and explosion-proof equipment.

STORAGE

- Keep container closed when not in use. Store in a dry, cool and well-ventilated place.
- Transfer only to approved containers with complete and appropriate labeling.
- Do not take internally.
- Keep out of the reach of children.
- Incompatible with strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USING THIS PRODUCT

NO person should use this product, or be in the area here it is being used, if they have chronic (long-term) lung or breathing problems or if they ever had a reaction to any one ingredients listed in the table below.

- Use only with adequate ventilation.
- Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
- Wash hands after using.
- This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 3) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 3, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

EXPOSURE LIMITS

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N-BUTYL ACETATE 123-86-4	TWA: 150 ppm TWA: 710 mg/m3 STEL: 200 ppm STEL: 950 mg/m3	TWA: 150 ppm TWA: 710 mg/m3 STEL: 200 ppm	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m3
PROPYLENE GLYCOL METHYL ETHER 107-98-2	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm STEL: 150 ppm	
N-BUTYL ALCOHOL 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m3	TWA: 50 ppm TWA: 150 mg/m3
TERTIARY BUTYL ACETATE 540-88-5	STEL: 200 ppm		
ACETONE 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm STEL: 1000 ppm	
XYLOL / XYLENE 1330-20-7	TWA: 100 ppm TWA: 435 mg/m3 STEL: 150 ppm STEL: 655 mg/m3	TWA: 100 ppm TWA: 435 mg/m3 STEL: 150 ppm STEL: 655 mg/m3	
ETHYLBENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m3 STEL: 125 ppm	
MICROCRYSTALLINE SILICA (QUARTZ) 14808-60-7 (Carcinogen)* Mfg. Recommended TWA is 10 mg/m3	TWA: 0.025 mg/m3	TWA: 10 mg/m3 total dust	
CRISTOBALITE 14464-46-1 (Carcinogen)*	TWA: 0.025 mg/m3	TWA: 10 mg/m3 total dust	
Benzyl Alcohol 100-51-6 Mfg. Recommended TWA is 10 ppm Mfg. Recommended TWA is 44.200 mg/m3			
TRIETHYLENETETRAMINE 112-24-3 Mfg. Recommended TWA is 1 ppm			

*This ingredient(s) is designated by either IARC, NTP, ACGIH or OSHA as probable or suspected carcinogen(s).

Appropriate engineering controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear goggles or safety glasses with unperforated side shields.
Skin and Body Protection	Use solvent resistant gloves and apron or suitable protective clothing, additional use of barrier cream is recommended.
Respiratory Protection	Apply in a spray booth with ventilation that is adequate to keep the TWA TLV below the stated limits as stated in the Section 8 table, otherwise use a positive pressure air supplied respirator (TL19C NIOSH/MSHA approved). If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 8 may be used as long as the TWA TLV are below stated limits. Follow respirator manufacturer's directions for use. Wear the respirator for the duration of spraying and until all vapors and mists are gone. ALL PERSONELL IN THE AREA WHERE THIS PRODUCT IS BEING USED MUST BE EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS. Wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive, when sanding or abrading dried film.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

OTHER PRECAUTIONS

If this product is to be mixed with other components before use, read and follow warning labels on all components.

Intentional misuse by deliberately concentrating and inhaling the vapors can be harmful or fatal.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid		
Appearance	Paint	Odor	Not determined
Color	See description	Odor Threshold	Not determined
Property	Values	Remarks • Method	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	56-278 °C / 132-532 °F		
Flash Point	27 °C / 81 °F		
Evaporation Rate	Slower Than Ether		
Flammability (Solid, Gas)	N/A - Liquid		
Upper Explosive Limit (UEL)	Not determined		
Lower Explosive Limit (LEL)	0.90 %		
Flammability Limit Vapor	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Heavier than air		
Specific Gravity	1.27		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient Auto-	Not determined		
Ignition Temperature	Not determined		
Decomposition	Not determined		
Temperature Kinematic	Not determined		
Viscosity Dynamic	Not determined		
Viscosity	Not determined		
VOC	2.09 #/gal or 251 gr/li	EPA Method 24	
VOC Actual	1.97 #/gal or 236 gr/li	Total VOC per gallon, as supplied	
Wt/Gal	10.62 #/gal		

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions.

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Avoid all possible sources of ignition.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

There is no specific data available for this product.

12. ECOLOGICAL INFORMATION

There is no specific data available for this product.

CAUTION: Can be toxic to living organisms. Keep out of soil and water stream.

ECOTOXICITY EFFECTS: Harmful to aquatic life with long lasting effects.

MOBILITY: Not available

BIOACCUMULATIVE POTENTIAL: Not available

PERSISTENCE / DEGRADABILITY: Not available

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Disposal should be in accordance with applicable regional, national and local laws and regulations. Only EPA approved facility must handle incineration if this method of disposal is chosen.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations (Refer to above).

14. TRANSPORT INFORMATION

NOTE

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

IATA

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

IMDG

UN/ID No	UN 1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	III

15. REGULATORY INFORMATION

There is no specific data available for this product.

16. OTHER INFORMATION

NFPA	Health Hazards 2*	Flammability 3	Instability 1	Special Hazards Not Determined
HMIS	Health Hazards *2	Flammability 3	Physical Hazards 1	Personal Protection J,X**

Chronic Hazard Star Legend
Personal Protection

*2=Chronic Health Hazard.

**J=Goggles, impermeable gloves, apron and vapor respirator required.

X=See your supervisor for guidance.

Issue Date:

Revision Date: 5-Mar-2021

Version: S

Revision Note: SDS format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : WINDEX® ORIGINAL GLASS CLEANER

Recommended use : Hard Surface Cleaner

Manufacturer, importer, supplier : S.C. Johnson & Son, Inc.
1525 Howe Street
Racine WI 53403-2236

Telephone : +18005585252
Emergency telephone number : 24 Hour Medical Emergency Phone: (866)231-5406
24 Hour International Emergency Phone: (703)527-3887
24 Hour Transport Emergency Phone: (800)424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Globally Harmonized System (GHS) Classification

This product does not meet the criteria for classification in any hazard class according to regulation OSHA 29 CFR 1910.1200.

Labelling

Precautionary statements

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain hazardous chemicals at or above a reportable level as defined by OSHA 29 CFR 1910.1200

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

Eye contact : No special requirements

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

Skin contact : No special requirements
Inhalation : No special requirements.
Ingestion : No special requirements

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during firefighting : Container may melt and leak in heat of fire.
Further information : Fight fire with normal precautions from a reasonable distance. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wash thoroughly after handling.
Environmental precautions : Outside of normal use, avoid release to the environment.
Methods and materials for containment and cleaning up : Dike large spills.
Clean residue from spill site.

7. HANDLING AND STORAGE

Handling
Precautions for safe handling : Avoid contact with skin, eyes and clothing.
For personal protection see section 8.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Advice on protection : Normal measures for preventive fire protection.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

against fire and explosion

Storage

Requirements for storage areas and containers : Keep container closed when not in use.

Other data : Stable under normal conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH or OSHA exposure limits have not been established for this product or reportable ingredients unless noted in the table above.

Personal protective equipment

Respiratory protection : No special requirements.

Hand protection : No special requirements.

Eye protection : No special requirements.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : blue

Odor : floral

Odour Threshold : Test not applicable for this product type

pH : 10.7
at (25 C)

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

Melting point/freezing point	: 0 C
Initial boiling point and boiling range	: 100 C
Flash point	: does not flash
Evaporation rate	: Test not applicable for this product type
Flammability (solid, gas)	: Does not sustain combustion.
Upper/lower flammability or explosive limits	: Test not applicable for this product type
Vapour pressure	: Calculated 31.7 hPa
Vapour density	: Test not applicable for this product type
Relative density	: 1.00 g/cm ³ at 25 C
Solubility(ies)	: soluble
Partition coefficient: n-octanol/water	: Test not applicable for this product type
Auto-ignition temperature	: Test not applicable for this product type
Decomposition temperature	: Heating can release hazardous gases.
Viscosity, dynamic	: similar to water

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

Viscosity, kinematic	: similar to water	
Oxidizing properties	: Test not applicable for this product type	
Volatile Organic Compounds Total VOC (wt. %)*	: 0.2 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations	
Other information	: None identified	:

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: If accidental mixing occurs and toxic gas is formed, exit area immediately. Do not return until well ventilated.
Conditions to avoid	: Direct sources of heat.
Incompatible materials	: Do not mix with bleach or any other household cleaners. Strong bases
Hazardous decomposition products	: Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

Emergency Overview	: This product does not meet the criteria for classification in any hazard class according to regulation OSHA 29 CFR 1910.1200.
Acute oral toxicity	: LD50 > 5000 mg/kg
Acute inhalation toxicity	: LC50 > 10 mg/L
Acute dermal toxicity	: LD50 > 5000 mg/kg

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

**WINDEX® ORIGINAL GLASS CLEANER**

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	No classification proposed	Inhalation - Dust and Mist
Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin corrosion/irritation	No classification proposed	-
Serious eye damage/eye irritation	No classification proposed	-
Skin sensitisation	No classification proposed	-
Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-
Carcinogenicity	No classification proposed	-
Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ toxicity - repeated exposure	No classification proposed	-
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition : None known.

12. ECOLOGICAL INFORMATION

Product : The product itself has not been tested.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

Toxicity

The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

No environmental data required.

Other adverse effects : None known.

13. DISPOSAL CONSIDERATIONS

Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

Notification status : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	0
Reactivity	0

NFPA Ratings

Health	1
Fire	0
Reactivity	0
Special	-

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

Further information

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 0.0

Print Date 09/06/2016

Revision Date 00/00/0000

SDS Number 350000014153

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Prepared by	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)

SAFETY DATA SHEET

A04408007

Section 1. Identification

Product name : Industrial WORK DAY™ Enamel Spray Paint
Green

Product code : A04408007

Other means of identification : Not available.

Product type : Aerosol.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Manufacturer : Krylon Products Group
101 Prospect Avenue NW
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 247-3266

Regulatory Information Telephone Number : (216) 566-2902

Transportation Emergency Telephone Number : (800) 424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Compressed gas
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 34.6%
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 75.2%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 81.5%

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

Hazard statements : Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes serious eye irritation.
Causes skin irritation.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

Response : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.
Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

Hazards not otherwise classified : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Acetone	≥25 - ≤50	67-64-1
Propane	≥10 - ≤25	74-98-6
n-Butyl Acetate	≥10 - ≤25	123-86-4
Butane	≤10	106-97-8
Lt. Aliphatic Hydrocarbon Solvent	≤5	64742-89-8
Ethyl 3-Ethoxypropionate	≤5	763-69-9
Xylene	<1	1330-20-7
Titanium Dioxide	≤0.3	13463-67-7
Ethylbenzene	≤0.3	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Date of issue/Date of revision : 7/2/2018	Date of previous issue : 5/4/2018	Version : 10.01	2/16
A04408007	Industrial WORK DAY™ Enamel Spray Paint Green	SHW-85-NA-GHS-US	

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness

Section 4. First aid measures

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 6. Accidental release measures

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	Exposure limits
Acetone	ACGIH TLV (United States, 3/2017). TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. NIOSH REL (United States, 10/2016). TWA: 250 ppm 10 hours. TWA: 590 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m ³ 8 hours.
Propane	NIOSH REL (United States, 10/2016). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m ³ 10 hours. OSHA PEL (United States, 6/2016). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours.

Section 8. Exposure controls/personal protection

n-Butyl Acetate	ACGIH TLV (United States, 3/2017). Oxygen Depletion [Asphyxiant]. NIOSH REL (United States, 10/2016). TWA: 150 ppm 10 hours. TWA: 710 mg/m³ 10 hours. STEL: 200 ppm 15 minutes. STEL: 950 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 150 ppm 8 hours. TWA: 710 mg/m³ 8 hours. ACGIH TLV (United States, 3/2017). STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Butane	NIOSH REL (United States, 10/2016). TWA: 800 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. ACGIH TLV (United States, 3/2017). STEL: 1000 ppm 15 minutes.
Lt. Aliphatic Hydrocarbon Solvent	None.
Ethyl 3-Ethoxypropionate	None.
Xylene	ACGIH TLV (United States, 3/2017). TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.
Titanium Dioxide	ACGIH TLV (United States, 3/2017). TWA: 10 mg/m³ 8 hours. OSHA PEL (United States, 6/2016). TWA: 15 mg/m³ 8 hours. Form: Total dust
Ethylbenzene	ACGIH TLV (United States, 3/2017). TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name	Exposure limits
Acetone	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1200 mg/m³ 8 hours. 15 min OEL: 1800 mg/m³ 15 minutes. 8 hrs OEL: 500 ppm 8 hours. 15 min OEL: 750 ppm 15 minutes. CA British Columbia Provincial (Canada, 6/2017). TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWA: 500 ppm 8 hours. TWA: 1190 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

Propane

STEV: 1000 ppm 15 minutes.
STEV: 2380 mg/m³ 15 minutes.
CA Saskatchewan Provincial (Canada, 7/2013).
STEL: 750 ppm 15 minutes.
TWA: 500 ppm 8 hours.

CA Alberta Provincial (Canada, 4/2009).
8 hrs OEL: 1000 ppm 8 hours.
CA British Columbia Provincial (Canada, 6/2017).
TWA: 1000 ppm 8 hours.
CA Quebec Provincial (Canada, 1/2014).
TWA: 1000 ppm 8 hours.
TWA: 1800 mg/m³ 8 hours.
CA Ontario Provincial (Canada, 7/2015).
TWA: 1000 ppm 8 hours.
CA Saskatchewan Provincial (Canada, 7/2013).
STEL: 1250 ppm 15 minutes.
TWA: 1000 ppm 8 hours.

n-Butyl Acetate

CA Alberta Provincial (Canada, 4/2009).
15 min OEL: 200 ppm 15 minutes.
15 min OEL: 950 mg/m³ 15 minutes.
8 hrs OEL: 150 ppm 8 hours.
8 hrs OEL: 713 mg/m³ 8 hours.
CA British Columbia Provincial (Canada, 6/2017).
TWA: 20 ppm 8 hours.
CA Ontario Provincial (Canada, 7/2015).
TWA: 150 ppm 8 hours.
STEL: 200 ppm 15 minutes.
CA Quebec Provincial (Canada, 1/2014).
TWA: 150 ppm 8 hours.
TWA: 713 mg/m³ 8 hours.
STEV: 200 ppm 15 minutes.
STEV: 950 mg/m³ 15 minutes.
CA Saskatchewan Provincial (Canada, 7/2013).
STEL: 200 ppm 15 minutes.
TWA: 150 ppm 8 hours.

Butane

CA Alberta Provincial (Canada, 4/2009).
8 hrs OEL: 1000 ppm 8 hours.
CA British Columbia Provincial (Canada, 6/2017).
TWA: 600 ppm 8 hours.
STEL: 750 ppm 15 minutes.
CA Quebec Provincial (Canada, 1/2014).
TWA: 800 ppm 8 hours.
TWA: 1900 mg/m³ 8 hours.
CA Ontario Provincial (Canada, 7/2015).
TWA: 800 ppm 8 hours.
CA Saskatchewan Provincial (Canada, 7/2013).
STEL: 1250 ppm 15 minutes.
TWA: 1000 ppm 8 hours.

Ethylbenzene

CA Alberta Provincial (Canada, 4/2009).
8 hrs OEL: 100 ppm 8 hours.
8 hrs OEL: 434 mg/m³ 8 hours.
15 min OEL: 543 mg/m³ 15 minutes.
15 min OEL: 125 ppm 15 minutes.

Section 8. Exposure controls/personal protection

	CA British Columbia Provincial (Canada, 6/2017). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWA/EV: 100 ppm 8 hours. TWA/EV: 434 mg/m³ 8 hours. STEV: 125 ppm 15 minutes. STEV: 543 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Acetone	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes.
Propane	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 1000 ppm 8 hours.
n-Butyl Acetate	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes.
Butane	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 1000 ppm 8 hours.
Ethylbenzene	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 20 ppm 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: 7
Melting point/freezing point	: Not available.
Boiling point/boiling range	: Not available.
Flash point	: Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	: 5.6 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.9% Upper: 12.8%
Vapor pressure	: 101.3 kPa (760 mm Hg) [at 20°C]
Vapor density	: 1.55 [Air = 1]
Relative density	: 0.71
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): <0.205 cm ² /s (<20.5 cSt)
Molecular weight	: Not applicable.
<u>Aerosol product</u>	
Type of aerosol	: Spray
Heat of combustion	: 31.053 kJ/g

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Oral	Rat	5800 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m ³	4 hours
Ethyl 3-Ethoxypropionate	LD50 Oral	Rat	3200 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetone	Eyes - Mild irritant	Human	-	186300 parts per million	-
	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	395 milligrams	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Ethyl 3-Ethoxypropionate	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Section 11. Toxicological information

Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Xylene	-	3	-
Titanium Dioxide	-	2B	-
Ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Acetone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Propane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
n-Butyl Acetate	Category 3	Not applicable.	Narcotic effects
Butane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Lt. Aliphatic Hydrocarbon Solvent	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene	Category 3	Not applicable.	Respiratory tract irritation
Ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Acetone	Category 2	Not determined	Not determined
Propane	Category 2	Not determined	Not determined
Butane	Category 2	Not determined	Not determined
Lt. Aliphatic Hydrocarbon Solvent	Category 2	Not determined	Not determined
Xylene	Category 2	Not determined	Not determined
Ethylbenzene	Category 2	Not determined	Not determined

Aspiration hazard

Section 11. Toxicological information

Name	Result
Propane	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1
Lt. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Date of issue/Date of revision : 7/2/2018	Date of previous issue : 5/4/2018	Version : 10.01	12/16
A04408007	Industrial WORK DAY™ Enamel Spray Paint Green	SHW-85-NA-GHS-US	

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	52364.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 6900 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Fundulus heteroclitus	4 weeks
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Lt. Aliphatic Hydrocarbon Solvent	Acute LC50 >100000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
Ethylbenzene	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 2930 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-	-	Readily
n-Butyl Acetate	-	-	Readily
Xylene	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Lt. Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Xylene	-	8.1 to 25.9	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Date of issue/Date of revision : 7/2/2018		Date of previous issue : 5/4/2018		Version : 10.01	13/16
A04408007	Industrial WORK DAY™ Enamel Spray Paint Green			SHW-85-NA-GHS-US	

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	UN1950	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	- <u>ERG No.</u> 126	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). <u>ERG No.</u> 126	- <u>ERG No.</u> 126	-	<u>Emergency schedules</u> F-D, S-U

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.
Ship type : Not available.

Section 14. Transport information

Pollution category

: Not available.

Section 15. Regulatory information

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		4
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

History

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

Date of issue/Date of revision	: 7/2/2018	Date of previous issue	: 5/4/2018	Version	: 10.01	15/16
A04408007	Industrial WORK DAY™ Enamel Spray Paint Green			SHW-85-NA-GHS-US		

Section 16. Other information

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

SAFETY DATA SHEET

Xylenes

Airgas
an Air Liquide company

Section 1. Identification

GHS product identifier	: Xylenes
Chemical name	: xylene
Other means of identification	: Benzene, dimethyl-; Xylol; xylene, mixed isomers, pure; xylene, crude; Benzene, dimethyl-; Xylene (mixed); Xylenes; Dimethylbenzene; XYLENES (Isomer Mixture); XYLENE, mixture of isomers; Benzene,dimethyl-(mixed)
Product type	: Liquid.
Product use	: Synthetic/Analytical chemistry.
Synonym	: Benzene, dimethyl-; Xylol; xylene, mixed isomers, pure; xylene, crude; Benzene, dimethyl-; Xylene (mixed); Xylenes; Dimethylbenzene; XYLENES (Isomer Mixture); XYLENE, mixture of isomers; Benzene,dimethyl-(mixed)
SDS #	: 001064
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253
24-hour telephone	: 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapor.
May form explosive mixtures with air.
Harmful in contact with skin or if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure if inhaled.
Toxic to aquatic life.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Section 2. Hazards identification

- Prevention** : Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Wash hands thoroughly after handling.
- Response** : Get medical attention if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Chemical name** : xylene
- Other means of identification** : Benzene, dimethyl-; Xylol; xylene, mixed isomers, pure; xylene, crude; Benzene, dimethyl-; Xylene (mixed); Xylenes; Dimethylbenzene; XYLENES (Isomer Mixture); XYLENE, mixture of isomers; Benzene,dimethyl-(mixed)
- Product code** : 001064

CAS number/other identifiers

- CAS number** : 1330-20-7

Ingredient name	%	CAS number
xylene	100	1330-20-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness
- Inhalation** : Adverse symptoms may include the following: respiratory tract irritation, coughing
- Skin contact** : Adverse symptoms may include the following: irritation, redness
- Ingestion** : Adverse symptoms may include the following: nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Avoid release to the environment. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Do not breathe vapor or mist. Do not swallow.

Section 7. Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Store locked up. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
xylene	ACGIH TLV (United States, 3/2017). STEL: 651 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL (United States, 6/2016). TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 655 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid. [COLORLESS LIQUID WITH AROMATIC ODOR]
- Color** : Colorless.
- Odor** : Aromatic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : -94.96°C (-138.9°F)
- Boiling point** : 136.16°C (277.1°F)
- Critical temperature** : Not available.
- Flash point** : Closed cup: 18°C (64.4°F)
- Evaporation rate** : 0.77 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.8%
Upper: 6.7%
- Vapor pressure** : 0.89 kPa (6.7 mm Hg) [room temperature]
- Vapor density** : 3.7 (Air = 1)
- Specific Volume (ft³/lb)** : 1.1628
- Gas Density (lb/ft³)** : 0.86 (25°C / 77 to °F)
- Relative density** : 0.861
- Solubility** : Not available.
- Solubility in water** : 0.15 g/l
- Partition coefficient: n-octanol/water** : 3.12
- Auto-ignition temperature** : 432°C (809.6°F)
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (room temperature): 0.58 mPa·s (0.58 cP)
- Flow time (ISO 2431)** : Not available.
- Molecular weight** : 106.17 g/mole
- Aerosol product**
- Heat of combustion** : -40839908 J/kg

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Gas. LD50 Oral	Rat Rat	5000 ppm 4300 mg/kg	4 hours -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
xylene	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Section 11. Toxicological information

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 2	Inhalation	Not determined

Aspiration hazard

Name	Result
xylene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Harmful if inhaled. May cause respiratory irritation.
Skin contact : Harmful in contact with skin. Causes skin irritation.
Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness
Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing
Skin contact : Adverse symptoms may include the following: irritation, redness
Ingestion : Adverse symptoms may include the following: nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure if inhaled.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	8.1 to 25.9	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Xylene	1330-20-7	Listed	U239

Section 14. Transport information

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1307	UN1307	UN1307	UN1307	UN1307
UN proper shipping name	XYLENES	XYLENES	XYLENES	XYLENES	XYLENES
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Additional information

DOT Classification

- : **Reportable quantity** 100 lbs / 45.4 kg [13.946 gal / 52.791 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- : **Limited quantity** Yes.
- : **Quantity limitation** Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
- : **Special provisions** IB2, T4, TP1

TDG Classification

- : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

IATA

- : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Cargo Aircraft Only: 60 L. Limited Quantities - Passenger Aircraft: 1 L.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Water Act (CWA) 311: xylene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Section 15. Regulatory information

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	xylene	1330-20-7	100
Supplier notification	xylene	1330-20-7	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : This material is listed.

New York : This material is listed.

New Jersey : This material is listed.

Pennsylvania : This material is listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : **Japan inventory (ENCS)**: This material is listed or exempted.
Japan inventory (ISHL): This material is listed or exempted.

Malaysia : This material is listed or exempted.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Thailand : Not determined.

Turkey : This material is listed or exempted.

United States : This material is listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	Expert judgment
ACUTE TOXICITY (dermal) - Category 4	Expert judgment
ACUTE TOXICITY (inhalation) - Category 4	On basis of test data
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2A	On basis of test data
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (inhalation) - Category 2	Expert judgment
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 2	Expert judgment

History

Date of printing : 12/27/2017

Date of issue/Date of revision : 12/27/2017

Date of previous issue : 2/9/2017

Version : 0.02

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Material number : R42310

Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

Emergency telephone numbers

For SDS Information : Compliance Services - 877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency : CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	clear, purple
Odour	characteristic

GHS Classification

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Corrosion

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 3
Oxirane, methyl-, polymer with oxirane, mono(2-ethylhexyl) ether	64366-70-7	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Get medical attention.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
If skin irritation persists, call a physician.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

physician or poison control center.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.

Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Standard procedure for chemical fires.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains, inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : effective ventilation in all processing areas

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Material

Remarks

- : Protective gloves
: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

- : Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.
Wear safety glasses with side shields or goggles.

Skin and body protection

- : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

- : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear, purple
Odour	: characteristic
Odour Threshold	: No data available
pH	: 11.50
Melting point/freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.007 g/cm ³
Bulk density	: No data available
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Acids

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include blistering, irritation, burns, and pain.
Causes severe skin burns and eye damage.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

Alcohols, C9-11, ethoxylated:

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: Risk of serious damage to eyes.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

Remarks	Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III - Limited quantity

Transportation Regulation: IMDG (Vessel):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, III - Limited quantity

Transportation Regulation: IATA (Cargo Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III

Transportation Regulation: IATA (Passenger Air):
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, III

Transportation Regulation: TDG (Canada):
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, III - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

TSCA list : No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL
TSCA On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

Further information

NFPA:

HEALTH	3
FLAMMABILITY	1
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms :



Corrosion

Signal word :

Danger:

Hazard statements :

Causes severe skin burns and eye damage.

Precautionary statements :

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

SAFETY DATA SHEET

ZEP INDUSTRIAL PURPLE DEGREASER & CLEANER QT_12CT

Version 3.2

Revision Date 10/01/2023

Print Date 05/27/2025

Version:	3.2
Revision Date:	10/01/2023
Print Date:	05/27/2025

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

**Safety Data Sheet****Prepared in Accordance with HCS 29
C.F.R. 1910.1200****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 0229B1NL **Revision Date:** 06/20/2023
Product Name: ZINC FILLER TYPE II **Supersedes Date:** 12/06/2022
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
2150 Schuetz Road
St. Louis, MO USA 63146
- Regulatory / Technical Information:
Contact Carboline Technical Services at
1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - regulatory@carboline.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification**2.1 Classification of the substance or mixture**

Hazardous to the aquatic environment, Acute, category 1
Hazardous to the aquatic environment, Chronic, category 1

2.2 Label elements**Symbol(s) of Product****Signal Word**

Warning

Named Chemicals on Label

None

HAZARD STATEMENTS

Hazardous to the aquatic environment, Acute, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, Chronic, category 1	H410	Very toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients**3.2 Mixtures****Hazardous ingredients**

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
ZINC (DUST OR FUME)	231-175-3	7440-66-6	75 - 100	H250-400-410	Aquatic Acute 1, Aquatic Chronic 1, Pyr. Sol. 1
ZINC OXIDE	215-222-5	1314-13-2	1.0 - <2.5	H400-410	Aquatic Acute 1, Aquatic Chronic 1

<u>CAS-No.</u>	<u>M-Factors</u>
7440-66-6	0
1314-13-2	0

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures**4.1 Description of First Aid Measures**

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: Wash off with warm water and soap.

AFTER EYE CONTACT: Flush eyes with water as a precaution. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Obtain medical attention. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

This product has been tested and shown to fall well below the level of gas emission when exposed to water (49CFR Part 173 E, 4) and is, therefore, not a regulated product and is not defined as dangerous when wet. Product is packaged in steel or plastic water tight containers.

4.3 Indication of any immediate medical attention and special treatment needed

No Information

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: No Information

FOR SAFETY REASONS NOT TO BE USED: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

In the case of dust or aerosol formation use respirator with an approved filter.

6.2 Environmental precautions

No Information

6.3 Methods and material for containment and cleaning up

No Information

6.4 Reference to other sections

No Information

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Do not smoke. Avoid dust formation. Protect from moisture. Avoid breathing vapors, mist or gas.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust. Avoid contact with the skin and the eyes.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Keep from any possible contact with water.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No Information

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
ZINC (DUST OR FUME)	7440-66-6	N/E	N/E	N/E
ZINC OXIDE	1314-13-2	2 MGM3	10 MGM3	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
ZINC (DUST OR FUME)	7440-66-6	5.0 MG/M3	N/E
ZINC OXIDE	1314-13-2	5 MGM3 5 MGM3 15 MGM3	N/E

FURTHER ADVICE: No Information

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Dust safety masks are recommended when the dust concentration is more than 10 mg/m3. Respirator must be worn if exposed to dust. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Maintain air concentrations below occupational exposure standards.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Blue - Grey Powder
Physical State	Solid
Odor	Odorless
Odor threshold	N/D
pH	N/A
Melting point / freezing point (°C)	N/A
Boiling point/range (°C)	N/D - .
Flash Point (°C)	N/A
Evaporation rate	N/A
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	N/D - N/D
Vapour Pressure, mmHg	N/A
Vapour density	N/A
Relative density	Not determined
Solubility in / Miscibility with water	N/D
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	No information available.
Explosive properties	Not determined

Oxidising properties

Not determined

9.2 Other information

VOC Content g/l:

No Information

Specific Gravity (g/cm3)

7.109

10. Stability and Reactivity**10.1 Reactivity**

No Information

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Keep from any possible contact with water.

10.5 Incompatible materials

Keep away from oxidising agents and strongly acid or alkaline materials. Strong oxidizing agents.

10.6 Hazardous decomposition products

Preparation reacts slowly with water resulting in evolution of hydrogen.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: Unknown

STOT-repeated exposure: Unknown

Aspiration hazard: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
7440-66-6	ZINC (DUST OR FUME)	>2000 mg/kg, oral, rat	Not Available	Not Available	0.000	>5.4 mg/L, / 4Hr ,rat, inh
1314-13-2	ZINC OXIDE	15000 mg/kg, oral, rat	Not Available	Not Available	0.000	0.000

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia): No information available.

IC50 72hr (Algae): No information available.

LC50 96hr (fish): No information available.

12.2 Persistence and degradability: No information available.

12.3 Bioaccumulative potential: No information available.

12.4 Mobility in soil: No information available.

12.5 Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects:

No information available.

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
7440-66-6	ZINC (DUST OR FUME)	No information	No information	No information
1314-13-2	ZINC OXIDE	No information	No information	No information

13. Disposal Considerations**13.1 WASTE TREATMENT METHODS:** Dispose of in accordance with local regulations.**14. Transport Information**

14.1 UN number	None
14.2 UN proper shipping name	Not Regulated
Technical name	N/A
14.3 Transport hazard class(es)	None
Subsidiary shipping hazard	N/A
14.4 Packing group	N/A
14.5 Environmental hazards	N/A
14.6 Special precautions for user	No information available.
EmS-No.:	N/A
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	No information available.

15. Regulatory Information**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****U.S. Federal Regulations: As follows -****CERCLA - Sara Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>%</u>
ZINC (DUST OR FUME)	7440-66-6	98.93
ZINC OXIDE	1314-13-2	1
LEAD	7439-92-1	0.01
CADMIUM	7440-43-9	0.01

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name**CAS-No.**

AMORPHOUS SILICON DIOXIDE

112926-00-8

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory (DSL)

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H250	Catches fire spontaneously if exposed to air.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

