At least 28 hazardous materials moved through Lancaster County in 2021 [list]

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Published: LNP | LancasterOnline July 23, 2023

At least 28 hazardous materials moved by train through Lancaster County in 2021, the most recent year for which that data is available in county officials' commodity reports.

The U.S. Department of Transportation defines hazardous material as "any materials that, because of quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety, or to the environment, if released.

Here is an alphabetical list of the hazardous materials included in the county's report:

Acrylic Acid, Stabilized

Common use: Production of plastics

Risk: Skin irritation, eye irritation

Alcohol, NOS (not otherwise specified)

Common uses: Can have multiple uses, including as an additive or solvent.

Risk: Flammable

Ammonium Nitrate

Common uses: In the making of fertilizer. In the making of explosives

Risk: Can intensify fires. Toxic inhalation risk

Anhydrous Ammonia

Common uses: In the making of fertilizer. Also, commonly used to make other compounds react with other things such as cleaning agents.

Risk: Toxic inhalation risk

Carbon Dioxide

Common Use: Solid Dry Ice, liquid or gas

Risk: Asphyxiation

Chlorine

Common Use: Water treatment for disinfection

Risk: Toxic inhalation risk

Combustible Liquids, NOS (not otherwise specified)

Common Use: N/A. This could be any type of combustible liquid that does not fall under another classification.

Risk: Flammable

Ethanol

Common Use: Additive to gasoline, solvent for many chemicals.

Risk: Flammable

Ethylene Oxide

Common Use: Production of plastics. Common starting material for other chemicals

Risk: Highly reactive. Inhalation risk-can cause cancer by reacting with DNA in body.

Flammable Liquid, NOS (not otherwise specified)

Common Use: N/A. This could be any type of combustible liquid that does not fall under another classification.

Risk: Flammable.

Hydrochloric Acid

Common Use: Muriatic Acid. Pickling of steel.

Risk: Corrosive-chemical burn. Can give off toxic fumes.

Hypochlorite Solution

Common Use: Bleach. Cleaning and disinfecting

Risk: Skin irritation

Isobutane

Common Use: Solvent. Starting material for other chemicals.

Risk: Boiling Liquid Expanding Vapor Explosion

LP Gas (Liquid Petroleum Gas)

Common Use: Cooking, heating

Risk: Boiling Liquid Expanding Vapor Explosion

Methanol

Common Use: Additive to gasoline

Risk: Flammable

Methyl Methacrylate

Common Use: Production of plastics

Risk: Skin Irritant

Pentane

Common Use: Blowing agents in manufacture of polystyrene

Risk: Fire

Petroleum Crude Oil

Common Use: Fuel

Risk: Flammable. Also, if spilled especially into water source it is non soluble.

Phosphoric Acid

Common Use: Making of fertilizer and making additives in detergents.

Risk: Chemical burn

Potassium Hydroxide Solution

Common Use: Making of other chemicals.

Risk: Chemical burn

Propane

Common Use: Barbeque grills, powers some vehicles

Risk: Flammable. Fire. Boiling Liquid Expanding Vapor Explosion

Propylene

Common Use: Production of Plastics

Risk: Flammable

Sodium Chlorate

Common Uses: Bleaching paper. Water treatment

Risk: Irritant. Oxidizer-may cause fire or explosion.

Sodium Hydroxide Solution

Common Uses: Making of soaps. Drain cleaner, used in many reactions

Risk: Corrosive-can cause skin burns or irritation

Styrene

Common Use: Raw material for polystyrene, a type of plastic. Used in the production of plastics.

Risk: Flammable. Irritant

Sulfur, Molten

Common Use: Production of plastics. Making Sulfuric Acid, detergents and fertilizers.

Risk: Inhalation risk. Irritant

Sulfuric Acid

Common use: Commodity chemical or commonly used chemical for multiple applications, making fertilizers.

Risk: Irritant, chemical burns.

Vinyl Chloride

Common Use: Production of plastics

Risk: Carcinogen and Explosion hazard