

MATERIAL SAFETY DATA SHEET

THE HALLSTAR COMPANY

Section 1 - Identification of Substance and Company

Product Name: REZILUBE® PPO4

Product Code: A275

Chemical Name: Polyester polyol

Supplier: The HallStar Company ⁽¹⁾
120 S. Riverside Plaza Suite 1620
Chicago, IL 60606
USA
PH: 877-427-4255
customerservice@hallstar.com

Emergency Phone Number(s): CHEMTREC (transportation) +1 703 527 3887

Section 2 - Hazard Identification

This product is not classified a dangerous according to EC criteria.

Section 3 - Information on Ingredients

<u>Component</u>	<u>Amount</u>	<u>Classification</u>	<u>CAS #</u>	<u>EC#</u>
Polyester polyol	100.0%	Not classified	Confidential	Polymer

Appearance/Odor: Tan liquid, characteristic odor.

Section 4 - First Aid Measures

Skin Contact: Wash affected skin with soap and water. Seek medical attention if symptoms persist.

Eye Contact: Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If irritation persists, consult a physician.

Ingestion: No emergency medical treatment necessary.

Inhalation: Person should be moved to a fresh air environment.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5 - Explosion and Fire-Fighting Measures

Flash Point (Closed Cup): >120°C

Extinguishing Media: CO₂, dry chemical, foam (alcohol resistant), water fog or fine spray.

Fire Fighting Procedures: Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. 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. Fight fire

Product Name: REZILUBE® PPO4

from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. 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 Fire-Fighting Procedures: A MSHA/NIOSH approved self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves) should be worn.

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.

Hazardous Combustion Products: Combustion products may include and are not limited to carbon dioxide and carbon monoxide.

Section 6 - Accidental Release/Spill Procedures

Steps to be Taken in Case Material is Released or Spilled: Dike and contain the spill with inert material (i.e., sand, earth, sawdust) and transfer liquid and solid diking material to separate containers for recovery or disposal. Wash floor area with hot water solution. Remove contaminated clothing and wash before reuse. Wash affected skin areas with soap and water. Keep spills out of all sewers and bodies of water.

Personal Precautions: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Spilled material may cause a slipping hazard.

Section 7 - Handling and Storage

Any use of this product in an elevated process should be evaluated to establish and maintain safe operating procedures.

Handling

This material is hygroscopic in nature. Since polyols are handled together with diisocyanates, proper distinction between these two kinds of products is essential in order to avoid undesired mixing resulting in uncontrolled polymerisation. Keep container tightly closed. Keep equipment clean. When using do not eat, drink or smoke. Avoid contact with skin and eyes. Wash thoroughly after handling.

Other Precautions: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

Storage

Store in a dry place. Store in the following material(s): Carbon steel, stainless steel, aluminum, polypropylene, teflon, polyethylene-lined container, glass-lined container. Shelf Life: 36 months @10-30° C.

Section 8 - Personal Protection

Exposure Limits: None established

Hand Protection: Chemical protective gloves should not be needed when handling this material. However, if skin contact is likely, chemical protective gloves should be worn. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection: None required for normal operation. If material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: organic vapor cartridge with a particulate pre-filter, type AP2.

Eye Protection: Safety glasses consistent with EN 166 or equivalent.

Product Name: REZILUBE® PPO4

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Measures: For normal operation, local exhaust ventilation should suffice. Direct exhaust when material becomes heated and vapors are given off.

Other: Eyewash facility in vicinity.

Section 9 - Physical and Chemical Properties

Boiling Point:	>180°C	Specific Gravity:	1.04 - 1.08
Flash Point (Closed Cup):	>120°C	Evaporation Rate:	N/A
Melting Point:	>5°C	Solubility in Water:	Insoluble
Vapor Pressure (20°C):	N/A	pH:	N/A
Appearance/Odor:	Tan liquid, characteristic odor.		

Section 10 - Stability and Reactivity

Stability: Stable under recommended storage conditions. See Storage, Section 7.

Conditions to Avoid: Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat. Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous Polymerization: Will not occur under normal circumstances.

Thermal Decomposition: Decomposition products can include and are not limited to: aldehydes, ketones, alcohols, organic acids, polymer fragments.

Section 11 - Toxicological Information

Acute Toxicity

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. LD50, Rat > 10,000 mg/kg

Eye Contact: May cause slight temporary eye irritation. Corneal injury is unlikely.

Skin Contact: Prolonged contact may cause slight skin irritation with local redness.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts. The dermal LD50 has not been determined.

Inhalation: At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

Section 12 - Ecological Information

Chemical Fate (Polyester polyol)

Movement & Partitioning: Based largely or completely on data for major component(s): Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is low (Koc between 500 and 2000). 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.

Persistence and Degradability: Based largely or completely on data for major component(s): Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Ecotoxicity (Polyester polyol)

Not expected to be acutely toxic to aquatic organisms.

Product Name: REZILUBE® PPO4

Section 13 - Disposal Considerations

Waste Disposal Methods: Material should be disposed of in accordance to current local and national regulations. Contacting a waste disposal service is recommended. The generation of waste should be avoided or minimized wherever possible. Incineration under approved, controlled conditions using incinerators suitable or designed for the disposal of hazardous chemical wastes, is the preferred method for disposal.

Section 14 - Transport Information

Road, Rail, Ocean, Air, Inland Waterways: Not Regulated

Not classified as hazardous according to the Department of Transportation.

Section 15 - Regulatory Information

European Inventory of Existing Commercial Chemical Substances (EINECS): This product is a polymer according to the definition in Directive 92/32/EEC (7th Amendment to Directive 67/548/EEC) and all of its starting materials and intentional additives are listed in the European Inventory of Existing Commercial Chemical Substances (EINECS) or in compliance with European (EU) chemical inventory requirements.

EC Classification and User Label Information: This product is not classified as dangerous according to EC criteria.

Section 16 - Other Information

Prepared By: DCU

Revision Date: 04/09
Supersedes: New

All information is presented in good faith using available information. The HallStar Company makes no representation of the accuracy or completeness of the information. The user should consider this information as a supplement to other information that may be available. User should also determine suitability of information in their situation to determine proper use and disposal, protection of persons and the environment.

⁽¹⁾ Affiliated companies include RTD*HallStar Company, HallStar Solutions Corp., Ester Solutions Company, Memphis Solutions Company and Marine Magnesium & Minerals Company.