

Safety Data Sheet

Date Issued: 1/25/17

Version: 1.0

1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

Product Names/Trade Names: ProThane Hardener, ProSpartic Hardener, FlexSpartic Hardener**Chemical Family:** Isocyanate**Manufacturer's Name:** ProREZ Coatings, LLC
PO BOX 153
Cromwell, CT 06416-0153 USA
General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)**Company 24 Hour Emergency Response Information:** CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

2. HAZARDS IDENTIFICATION

Emergency Overview: CAUTION. Contains hexamethylene diisocyanate (HDI) (CAS NO. 822-06-0). Inhalation of HDI mists or vapors may cause respiratory irritation, breathlessness, chest discomfort, and reduced pulmonary function. Overexposure well above the OSHA PEL may result in bronchitis, bronchial spasms, and pulmonary edema.

Long-term exposure to HDI has been reported to cause lung damage, including reduced lung function which may be permanent. Acute or chronic overexposure to HDI may cause sensitization in some individuals resulting in allergic respiratory reactions including wheezing, shortness of breath, and difficulty to breathing.

Classification of the substance

Acute Tox.	4	(Inhalation - mist)	Acute toxicity
Resp. Sens.	1		Respiratory sensitization
Skin Sens.	1		Skin sensitization
STOT SE	3	(irritating to respiratory system)	Specific target organ toxicity — single exposure

Label Elements

Hazardous components that must be listed on the label:
No special label requirement.**Signal Word: Danger****Pictograms:**

Safety Data Sheet

Hazard Statements:

- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.

Precautionary Statements (Prevention)

- P280 Wear protective gloves.
- P271 Use only outdoors or in a well-ventilated area.
- P260 Do not breathe mist or vapor.
- P261 Avoid breathing mist.
- P284 In case of inadequate ventilation wear respiratory protection.
- P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response)

- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
- P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
- P362 + P364 Take off contaminated clothing and wash before reuse.

Precautionary Statements (Storage):

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Precautionary Statements (Disposal):

- P501 Dispose of contents/container to hazardous or special waste collection point.

General Information: The isocyanates component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA.

Read the entire MSDS for a more thorough evaluation of the hazards.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
Homopolymer of hexamethylene diisocyanate	>60-100%	28182-81-2
Hexamethylene diisocyanate	<0.5%	822-06-0

Safety Data Sheet

4. FIRST-AID MEASURES

General advice: Seek medical advice or medical attention if condition persists.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes.

Skin Contact: Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

Ingestion: Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. **Do not induce vomiting.**

Inhalation: Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Note to physician: No specific treatment. Treat symptomatically. Call the poison control center immediately if large quantities have been ingested.

5. FIRE-FIGHTING MEASURES

Suitable Fire Extinguishing Media: Carbon dioxide (CO₂). Foam. Dry chemical.

Flammable Limits: Not available.

Explosion Limits: Not Available

Auto-Ignition Temperature: 805°F (430°C)

Flash Points: Open Cup: 437°F (225°C), Closed Cup: 338°F (170°C)

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: 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 (see Section 8).

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

Methods for Cleaning up: Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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). 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.

Safety Data Sheet

7. HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment, PPE (see Section 8). Eating and drinking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated PPE or clothing, wash hands and face before eating and drinking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Use only in area provided with appropriate exhaust ventilation. Empty containers retain product residue and can be hazardous. Do not get in eyes, skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment.

Storage: Store between 15-27°C (60-80°F) in accordance with local regulations away from sources of heat, ignition, and direct sunlight. Store in original container. Keep in a dry, well-ventilated area, and away from incompatible materials (see section 10). 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, unapproved or reactive containers. Use appropriate containment to avoid environmental contamination.

Special Handling: If bulging of drum occurs, transfer to ventilated cool area or outside away from people, puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component	CAS	General Exposure Limits	General Exposure Limits
Aliphatic polyisocyanate	28182-81-2	TWA 0.5 mg/m ³	STEL 1.0 mg/m ³ (15-min)
Hexamethylene diisocyanate (<0.5%)	822-06-0	ACGIH TWA 0.005 ppm	CLV 0.02 ppm

Engineering Measures: Work in well ventilated area. Provide natural or explosion-proof fan to ensure adequate ventilation, especially in confined area. Avoid contact with skin, eyes, and clothing.

Environmental Exposure Controls: Construct a dike to prevent spreading. 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.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. 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.

Personal protective equipment:

Respiratory - In case of inadequate ventilation wear 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.

Eye - Splash proof safety glasses.

Skin - Rubber or plastic apron. Rubber or plastic gloves. Long sleeved clothing or wear protective sleeves. Remove and wash contaminated clothing before re-use.

Safety Data Sheet

Other protective equipment information - 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. Neoprene gloves. PVC disposable gloves. Nitrile rubber. Butyl rubber. Impervious gloves. (The breakthrough time of the selected glove(s) must be greater than the intended use period.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Odor:	Mild
Color:	Clear, Pale Yellow
PH Value:	Not Applicable
Boiling Point:	(>150°C)
Melting Point:	Not Applicable
Vapor Pressure:	4.7x10 ⁻⁷ mmHg @ 70°F
Vapor Density:	Not Applicable
Density (Nominal):	>1.0 g/cm ³ @ 70°F
Solubility in water:	Reacts with water
Evaporation Rate (Butyl Acetate = 1):	Not Applicable
Volatile Organic Compounds:	Nil

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions to avoid: Moisture. Excessive heat.

Materials to avoid: Water, alcohols, amines, strong bases, substances/products that react with isocyanates.

Hazardous decomposition products: Carbon dioxide. Carbon monoxide. Hydrogen cyanide. Nitrogen oxides. Aromatic isocyanates. Gases/vapors.

Hazardous polymerization: Under normal conditions hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral - LD50/rat: >5000 mg/kg

Sensitization - Guinea pig: sensitizing

Inhalation Sensitization - Guinea pig: No

Safety Data Sheet

12. ECOLOGICAL INFORMATION

Ecotoxicity effects:

Biodegradability - 28 days, 13% not readily biodegradable

Acute Fish Toxicity - 96 hr, LC50/Zebra Fish: 66 mg/l

Aquatic Invertebrates - 48 hr, EC50/Daphnia Magna: 88 mg/l

Plants -72 hr EC50/Scenedesmus Subspicatus: 113 mg/l

Harmful to aquatic organisms. May cause long term damage to environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste handling site for recycling or disposal. Incineration or landfill should only be considered when recycling is not feasible. 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. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

Regulatory Information	UN number	Classes	Packing Group	Proper Shipping Name
DOT				Not Regulated – Not Dangerous Goods
IATA				Not Regulated – Not Dangerous Goods
IMDG				Not Regulated – Not Dangerous Goods
TDG				Not Regulated – Not Dangerous Goods

15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Listed under Polymer Exempt
Canada	DSL/CEPA	Included on Inventory
China	SEPA	Included on Inventory
Japan	ENCS	Included on Inventory

Safety Data Sheet

OSHA: This product is considered to be a hazardous chemical under 29 CFR 1910.1200.

RCRA - Not a hazardous waste.

Clean Air Act Section 112 - Hexamethylene Diisocyanate 822-06-0.

SARA Section 311 AND 312 - 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: ACUTE, CHRONIC

SARA Section 313 - This product contains the following substances 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: None.

SARA Extremely Hazardous Substance (EHS) -

Component	CAS	% By Weight	RQ
hexamethylene diisocyanate	822-06-0	<0.5	100 lb

California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) - This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

Canada WHMIS - Class D2B: Material causing other toxic effects.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	2	2
3=Serious Hazard	Flammability	1	1
2=Moderate Hazard	Reactivity	1	1
1=Slight Hazard			
0=Minimal Hazard			

THE INFORMATION AND RECOMMENDATIONS PRESENTED HEREIN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. USER MUST CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THESE PRODUCTS FOR THEIR PARTICULAR PURPOSES AND USAGE. BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, PROREZ COATINGS, LLC AND ITS AFFILIATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, OTHER THAN MATERIAL CONFORMS TO OUR APPLICABLE CURRENT SPECIFICATIONS. PROREZ COATINGS, LLC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE ON THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET.

END OF DATA SHEET