Safety Data Sheet

Rockhard WB Urethane Hardener B

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Rockhard WB Urethane Hardener
Common Name: Aliphatic Polyisocyanate
Chemical Family: Hydrophilic Aliphatic Polyisocyanate based on Hexamethylene Diisocyanate
Product Use: Component for Coatings in Flooring applications

2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Respiratory or skin sensitization, 1 Respiratory
Environmental, Hazards to the aquatic environment - Acute, 2
Health, Skin sensitization, 1
Health, Acute toxicity, 4 Inhalation
Environmental, Hazards to the aquatic environment - Chronic, 3
Health, Specific target organ toxicity - Single exposure, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H334 - May cause allergy or asthma symptoms of breathing difficulties if inhaled
H401 - Toxic to aquatic life
H317 - May cause an allergic skin reaction
H332 - Harmful if inhaled
H412 - Harmful to aquatic life with long lasting effects
H335 - May cause respiratory irritation

GHS Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
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.
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.
P284 - Wear respiratory protection.

Rockhard WB Urethane Hardener B

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
28182-81-2	40-90%	Hexane, 1,6-diisocyanato-, homopolymer
-40-7	5-12%	Proprietary
822-06-0	<0.5%	Hexamethylene diisocyanate

4 FIRST AID MEASURES

Inhalation: Treatment is symptomatic. An individual having a sensitization reaction hsould be removed from further exposure. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Remove contaminated clothing and wash before reuse. Wash with soap and water. Use lukewarm water if possible.

Eye Contact: Get immediate medical attention. Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema imparing vision

Ingestion: Wash out mouth with water. Do NOT induce vomiting or attempt chemical neutralization. Get prompt, qualified medical attention.

Most Important Symptom(s)/Effect(s)

Acute: Isocyante Vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limits or guidelines with similar symptions as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills) has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible

5 FIRE FIGHTING MEASURES

Flash Point: 365 F

Flash Point Method: Tag COC

Dry powder, foam, carbon dioxide.Water fog.

Special Firefighting Procedures: Wear self-contained breathing apparatus and protective clothing. Water spray is useful in cooling fire-exposed vessels and in dispersing vapors.

6 ACCIDENTAL RELEASE MEASURES

Pick up excess with inert absorbant material and place into separate waste container.
Evacuate non-essential personel from area.
Keep away from drains and ground water.

Pour decontamination solution over spill and allow to react for at least 15 minutes. Collect material in open containers with further amounts of decontamination solution.
Decontamination solution: 20% Non-ionic surfactant (Tergitol TMN-10) with 80% Water

Rockhard WB Urethane Hardener B

7 HANDLING AND STORAGE

Handling Precautions: Keep material out of reach of children. Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Use approved containers only. Wash thoroughly after handling. Wash clothing before reuse and decontaminate or discard contaminated shoes.

Storage Requirements: Keep away from heat, sparks, and flames. Store in cool/dry area. Suitable packing materials.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use local exhaust at filling zones and where leakage is probable.

Personal Protective Equipment: Chemical resistant gloves; Chemical safety glasses; Exhaust ventilation; Respirator.

Hexamethylene Diisocyanate Polymer
Exposure Limits:

USA OSHA (TWA_5)/PEL): 5 mg/m3 8 hours
ACGIH (TWA/TLV): 0.03 mg/m3 8 hours

Hexamethylene - 1,6 Diisocyanate
ACGIH (TWA/TLV): 0.005 ppm

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless liquid.		
Physical State:	Liquid	**Odor:**	Faint ethereal and sweetish odor.
Odor Threshold:	Not determined	**Solubility:**	Insoluble in water. Reacts slowly with wa
Spec Grav./Density:	1.07-1.09	**Percent Volatile:**	less than 10%
Viscosity:	ND	**Freezing/Melting Pt.:**	ND
Boiling Point:	ND	**Flash Point:**	ND
Partition Coefficient:	ND	**Vapor Density:**	ND
Vapor Pressure:	ND	**Auto-Ignition Temp:**	ND
pH:	ND	**UFL/LFL:**	ND
Evap. Rate:	ND		
Decomp Temp:	ND		

10 STABILITY AND REACTIVITY

Reactivity: Contact with moisture, other materials that react with isocyanates, or temperatures above 350 F may cause polymerization

Chemical Stability: Product is stable under normal conditions.

Conditions to Avoid: heat, flames and sparks.

Materials to Avoid: Water, amines, strong bases, alcohols, copper alloys

Hazardous Decomposition: CO, CO2, Oxides of Nitrogen, HCN, HDI by high Heat

Hazardous Polymerization: May occur. Contact with moisutre or other materials that react with isocyanates or temperatures over 400F may cause polymerization

Rockhard WB Urethane Hardener B

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral (LD 50): 2500 mg/kg (rat)

Inhalation (LC 50): 0.467 mg/l

Skin irritation: Isocyanates react with skin protein and moisture and can cause irritation. Symptoms include reddening, swelling, rash, scaling or blistering. Some may develop skin sensitization from skin contact. Cured material is difficult to remove. Repeated or prolonged contact can result in dry, defatted and cracked skin causing increased susceptibility to infection.

Eye irritation: Vapors are irritating and can cause pain, tearing, reddening and swelling. If left untreated, corneal damage can occur and injury is slow to heal but usually reversible

Sensitation:

Chronic Toxicity: ND

12 ECOLOGICAL INFORMATION

Aquatic Toxicity: No data on the product itself. Based on the components, the product is acutely harmful for aquatic organisms.

Acute Toxicity to Fish: 100mg/l

Acute Toxicity to Aquatic Invertebrates: 127 mg/l

Not readily biodegradable

13 DISPOSAL CONSIDERATIONS

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

Rockhard WB Urethane Hardener B

14 TRANSPORT INFORMATION

NA3082, Other regulated substances, liquid, n.o.s., 9, PGIII

Not Regulated

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Hexane, 1,6-diisocyanato-, homopolymer (28182-81-2) [40-90%] TSCA

Proprietary (-40-7) [5-12%]

RQ(100LBS), Hexamethylene diisocyanate (822-06-0) [<0.5%] CERCLA, HAP, MASS, SARA313, TSCA, TXAIR

Regulatory CODE Descriptions

RQ = Reportable Quantity
TSCA = Toxic Substances Control Act
CERCLA = Superfund clean up substance
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
SARA313 = SARA 313 Title III Toxic Chemicals
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

The above information is not claiming characteristics of the product in term of legal claims of performance / guarantee.

Disclaimer:
Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

This information only describes safety measures and no liability may arise from the use or application of the product described herein.

This information is given in good faith and based on our current knowledge of the product.