

Flexmar NextGen High Solids 0 VOC Hardener Component B

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Flexmar NextGen High Solids 0 VOC Hardener Component B
Common Name: Aliphatic Polyisocyanate
Supplier Details: Flexmar Coatings Inc.
 PO Box 210
 New Kensington, PA 15068
Emergency: Chemtrec (800) 424-9300

2 HAZARDS IDENTIFICATION

Classification of Substance

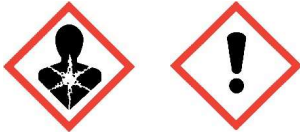
GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

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 or 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.

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3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
28182-81-2	40-90%	Hexane, 1,6-diisocyanato-, homopolymer
-40-7	7-20%	Proprietary
98-56-6	0-9%	Benzene, 1-chloro-4-(trifluoromethyl)-
822-06-0	<1%	Hexamethylene diisocyanate

4 FIRST AID MEASURES

- Inhalation:** Treatment is symptomatic. An individual having a sensitization reaction should 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 impairing 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: Isocyanate 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 symptoms 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:** 116 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. During a fire, HDI vapors and other highly toxic gases may be generated by thermal decomposition or combustion.

6 ACCIDENTAL RELEASE MEASURES

Pick up excess with inert absorbant material and place into separate waste container. Shovel into metal containers and seal before discarding into approved landfill or incinerate in accordance with local, state, or federal regulations.

Evacuate non-essential personnel 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

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7 HANDLING AND STORAGE

Handling Precautions: Storage Temperature (min/max): 32F-85F. Avoid storing in direct sunlight or high humidity and heat above 85F. If the container is opened and resealed, moisture contamination will cause polymerization and carbon dioxide formation. This can result in bulging of container and increased viscosity, making the product unusable.

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 (TWA₈)/PEL): 0.5 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 Threshold: Not determined

Odor: Faint ethereal and sweetish odor.

Solubility: Insoluble in water. Reacts slowly with water to liberate CO₂ gas.

Specific Gravity or Density: 1.07-1.09

Percent Volatile: less than 10%

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 moisture or other materials that react with isocyanates or temperatures over 400F may cause polymerization

Flexmar NextGen High Solids 0 VOC Hardener Component 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

Sensitization:

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

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14 TRANSPORT INFORMATION

Land transport ADR/RID and GGVS/GGVE: Not Regulated

Sea transport IMDG/GGVSee: Not Regulated

Air Transport ICAO-TI and IATA-DGR: Not Regulated

15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

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

[7-20%] Proprietary (-40-7)

[0-9%] Benzene, 1-chloro-4-(trifluoromethyl)- (98-56-6) TSCA

[<1%] RQ(100LBS), Hexamethylene diisocyanate (822-06-0) CERCLA, HAP, MASS, SARA313, TSCA, TXAIR

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

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:

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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.

Revision Date: [N/A]