

Date Prepared: 04/22/10
Supersedes: New
Product Name: GreenThane 310 WB (Part B)

ChemMasters

Material Safety Data Sheet

1. Chemical Product and Company Information

Product Name: GreenThane 310 WB (Part B)
Product Description: 2-Component Water-Based Urethane, Part B

ChemMasters
300 Edwards Street
Madison, Ohio 44057
440-428-2105

In Case of Emergency Contact:
CHEMTREC 800/424-9300

2. Hazards Identification

CAUTION

Causes Eye Irritation

Causes Skin Irritation and/or Allergic Skin Reaction

WHMIS Classification: D2B, (Toxic) Symbol: Stylized T

Potential Health Hazards - Acute

Eye: Causes irritation with symptoms of reddening, tearing and stinging. May cause corneal injury.

Skin: Causes irritation with symptoms of reddening, swelling, itching and rash. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, swelling, itching and rash.

Inhalation: Diisocyanate or polyisocyanate 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 unusually reversible.

Ingestion: May cause irritation; Symptoms may include abdominal pain, nausea, vomiting and diarrhea.

Potential Health Effects - Chronic

Carcinogenicity:

NTP
NO

IARC Monographs
NO

OSHA Regulated
NO

Chronic Inhalation: As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to diisocyanates or polyisocyanates at levels well below exposure limits or guidelines. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an lung sensitivity can persist for weeks and in severe cases for several years, Sensitization can be permanent. Chronic overexposure to diisocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent.

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3. Composition / Information on Ingredients

Hazardous Components	CAS #	% by Weight
Homopolymer of Hexamethylene	28182-81-2	60-100%
Diisocyanate Hexamethylene-1,6-Diisocyanate	822-06-0	<=0.25%

4. First Aid Measures

Eye: Immediately flush with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

Skin: Wash off immediately with plenty of soap and water. Remove contaminated clothing immediately. Wash contaminated clothing before reuse. Get medical attention if any irritation develops.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. extreme asthmatic reactions can be life threatening.

Ingestion: Do not induce vomiting. Wash mouth out with water. Do not give anything by mouth to an unconscious person. Get medical attention.

Notes to Physician: **Eyes:** 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. **Skin:** this compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. **Ingestion:** Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. **Inhalation:** Treatment is essentially symptomatic. An Individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

5. Fire Fighting Measures

Flash Point (method used): 365°F, (185° C)

Flammable Limits (% volume in air): **Lower** = No data available **Upper** = No data available

Auto Ignition Temperature: No data available

Extinguishing Media: Dry chemicals, CO₂, Halon, water spray or foam.

Hazard Combustion Products: Carbon dioxide and/or carbon monoxide.

Fire Fighting Instructions: Remove all ignition sources. Wear self contained breathing apparatus and complete personal protective equipment when entering confined areas where potential exposure to vapors or products of combustion exists.

6. Accidental Release Measures

Spill: Absorb with inert material, then place in chemical waste container for later disposal.

7. Handling and Storage

Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Always use good industrial hygiene practices and safety guidelines when dealing with this potentially hazardous product.

Storage: Keep containers closed and store in a cool, dry, well ventilated area. Max storage temperature 122°F.

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8. Exposure Controls / Personal Protection

Exposure Controls: Mechanical exhaust should be used. A source of clean water should be available for flushing eyes and skin.

Personal Protection: Chemical Resistant Gloves, safety goggles, long sleeved shirt and pants should be worn as a minimum to prevent contact with the skin. Respirators approved for use in isocyanate containing environments should be used when using spray application.

Warning: Once a worker has been diagnosed as sensitized to any isocyanate, no further exposure can be permitted.

Homopolymer of Hexamethylene	28182-81-2	TWA: 0.5 mg/m ³ STEL: 1.00 mg/m ³ (15 minutes)
Diisocyanate Hexamethylene-1,6-Diisocyanate	822-06-0	TWA: 0.005 ppm CEL: 0.02 ppm

9. Physical and Chemical Properties

Appearance: Light Yellow, Liquid

Odor: Mild Odor

Boiling Point: Decomposition

Viscosity: 800 mPa.s @ 20°C

Vapor Pressure (mm/Hg): 5.2 x 10⁻⁹ @ 68 F

Bulk Density: 9.597 lb./gal

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

Specific Gravity (H₂O = 1): 1.15

Evaporation Rate (n-Butyl Acetate = 1): No data available

10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Excessive heat

Incompatibility (materials to avoid): Contamination with water, strong bases, alcohol and copper alloys.

Hazardous Decomposition or By-products: Thermal decomposition may yield oxides of carbon and nitrogen, hydrogen cyanide, Isocyanate, Isocyanic Acid and other undetermined chemicals in addition to dense black smoke.

Hazardous Polymerization: Temperatures above 350°F (177°C) may cause polymerization.

11. Toxicological Information

Components

	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Homo Polymer of Hexamethylene Diisocyanate	>5000 mg/kg	>5000 mg/kg	390-453 mg/m ³ , aerosol 4 hrs.

12. Ecological Information

Not Biodegradable

13. Disposal Considerations

Dispose of in accordance with all federal, state and local regulations. If uncertain of local regulations in your area, contact the proper environmental authorities for disposal. Incineration is the method of preference. Proper RSPA (Waste) Shipping Name: NA3082, Other Regulated Substances, Liquid, N.O.S. (Contains Hexamethylene-1,6-Diisocyanate), 9, III.

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14. Transportation Information

For U S National, Air & Vessel Shipments

Shipping Description: Non regulated

Emergency Response Guide Number: Not applicable

Hazard Class: Not applicable

15. Regulatory Information

OSHA: This material is hazardous by definition of Hazardous Communications Standard (29 CFR 1910.1200)

CERCLA Reportable Quantity: Not applicable

SARA Title III:

Section 311/312 hazard categories: acute health, delayed health

Section 313 reportable ingredients:

<u>Components</u>	<u>CAS #</u>	<u>Maximum %</u>
None		

16. Other Information

MSDS Status: New 4/22/10

See Industrial Abbreviation Legend Below.

Industrial Abbreviation Legend

ACGIH	American Conference of Governmental Industrial Hygienists	mg/m ³	milligrams per cubic meter
CAA	Clean Air Act (EPA)	NIOSH	National Institute for Occupational Safety and Health
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act of 1980 (Superfund) (EPA)	NTP	National Toxicology Program
CNS	Central Nervous System	OSHA	Occupational Safety and Health Administration
CWA	Clean Water Act (EPA)	PEL	Permissible Exposure Limit
DOT	Department of Transportation	ppm	parts per million
EPA	Environmental Protection Agency	RCRA	Resource Conservation and Recovery Act (EPA)
g/kg	grams per kilogram	SARA	EPA's Superfund Amendment and Reauthorization Act (EPA)
IARC	Internal Agency for Research on Cancer	STEL	Short-Term Exposure Limit, ACGIH terminology
LC50	Lethal Concentration in which 50% of the test animals are expected to die	TLV	Threshold Limit Value
LD50	Lethal Dose in which 50% of the test animals are expected to die	TWA	Time-Weighted Average

THIS PRODUCT IS FORMULATED AND LABELED FOR INDUSTRIAL AND COMMERCIAL APPLICATION ONLY

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