

# SAFETY DATA SHEET



Issue Date: October 12, 2015

Revision Date: October 12, 2022

Version 2022

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** GreenThane 310WB Part B Hardener

**Other Means of Identification:**

**SDS #:** F3105.01B

**Recommended Use:** 2 Component Urethane Coating for Concrete Surfaces

**Restrictions on Use:** No Data

**Supplier of the Safety Data Sheet including Address:**

ChemMasters Inc.  
300 Edwards Street  
Madison, OH 44057

**Telephone Numbers**

**Company Phone Number:**

Phone: 800-486-7866, 440-428-2105

Fax: 440-428-7091

**Emergency Telephone :** ChemTrec 800-424-9300 (United States & Canada), International Call: 1-703-527-3887

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

**OSHA Hazards:** May cause allergic skin reaction, Harmful if inhaled, May cause allergy or asthma symptoms or breathing difficulties if inhaled, May cause respiratory irritation, May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled, May cause eye irritation

### GHS Classification

Acute Toxicity, Inhalation – Category 4

Sensitization – Respiratory – Category 1

Skin sensitization – Category 1

Specific target organ toxicity – Single Exposure – Category 3 (Respiratory System)

Specific target organ toxicity – Repeated Exposure – Category 2 (Lungs)

**Label Elements, including precautionary statements**

**Pictograms:** Two diamond-shaped pictograms: one with a silhouette of a person with a star on their chest (Health Hazard) and one with an exclamation mark (Irritant).

**Signal Word:** Danger

**Hazard Statements:**

- H317 May cause allergic skin reaction  
 H332 Harmful if inhaled  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H335 May cause respiratory irritation  
 H371 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

**Precautionary Statement(s)****Prevention:**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P264 Wash hands and exposed skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product  
 P271 Use only outdoors or in a well-ventilated area  
 P272 Contaminated work clothing should not be allowed out of the workplace  
 P280 Wear protective gloves  
 P284 In case of inadequate ventilation wear respiratory protection

**Response:**

- P302+P352 IF ON SKIN: Wash with plenty of soap and water  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention  
 P362+P364 Take off contaminated clothing and wash before reuse  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
 P308+P311 If exposed or concerned: Call a POISON CENTER/doctor

**Storage:** P403+P235+P233 Store in a well-ventilated place. Keep cool. Keep container tightly closed.  
 P405 Store locked up

**Disposal:** P501 Dispose of contents/container in accordance with local/regional/national regulations.

**Hazards not otherwise classified:** May cause eye irritation

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Component**

|  |                   |          |
|--|-------------------|----------|
| Homopolymer of Hexamethylene Diisocyanate                                | CAS#: 28182-81-2  | 60-100%  |
| Hydrophilic Aliphatic Polyisocyanate based on Hexamethylene Diisocyanate | CAS#: 666723-27-9 | 15-25%   |
| Hexamethylene-1,6-Diisocyanate   | CAS#: 822-06-0    | 0.1-1.0% |
| N,N-dimethylcyclohexylamine  | CAS#: 98-94-2     | 0.1-1.0% |

Ingredients not listed on this safety data sheet are considered to be non-hazardous according to OSHA 1910.1200 or are not present above their cutoff levels. Where a range is displayed, the exact percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**First Aid Measures**

**General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth if conscious.

**Skin Contact:** IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash off with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Alcohol-resistant foam, dry chemical, halon or carbon dioxide

**Specific Hazards Arising from the Chemical**

In a fire or if heated a pressure increase will occur and the container may burst.

**Hazardous Combustion Products:** Carbon oxides, Nitrogen Oxides, Isocyanate, Isocyanic Acid, Hydrogen cyanide

**Protective Equipment and Precautions for Firefighters**

Wear self-contained breathing apparatus and full protective gear for firefighting.

**Further Information:** Use water spray to cool unopened containers. See Section 7 for safe handling and storage

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

Use personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or waterways.

**Methods and Material for Containment and Cleaning Up**

Contain spillage by diking or damming in a proper containment area. Absorb spilled material with Suitable adsorbent material (vermiculite, Hi-dri, kitty litter) and place in container for disposal according to local regulations.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

**Conditions for Safe Storage, Including any Incompatibilities**

Keep container tightly closed in a dry, cool and well ventilated place. Protect from freezing. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid contact with water, amines, strong bases, alcohols and copper alloys.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

**Component Exposure Limits**

Homopolymer of Hexamethylene Diisocyanate, CAS#: 28182-81-2: TWA 0.005 ppm ACGIH  
Hexamethylene-1,6-Diisocyanate, CAS#: 822-06-0: TWA 0.005 ppm ACGIH

### Appropriate Engineering Controls

Local Ventilation: Recommended

General Ventilation: Recommended

### Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection:** Use proper protection – Safety Glasses as a minimum

**Skin and Body Protection:** Wash at mealtime and end of shift. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.). Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

**Respiratory Protection:** Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

### General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before & after breaks and work day.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear

**Color:** Light yellow

**Odor:** Slight Odor

**Odor threshold:** No Data

| <u>Property</u>                     | <u>Value</u>                              | <u>Remarks – Method</u> |
|-------------------------------------|---|-------------------------|
| Vapor Pressure                      | 5.2 X 10 <sup>-9</sup> @ 68 F (20 C) mmHg | HDI Polyisocyanate      |
| Vapor Density                       | Not Available                             |                         |
| Relative Density                    | Not Available                             |                         |
| pH:                                 | Not Available                             |                         |
| Melting/Freezing Point              | Not Available                             |                         |
| Solubility                          | Insoluble in Water                        |                         |
| Evaporation Rate                    | Not Available                             |                         |
| Flash Point                         | 185 Degrees C (365 Degrees F)             | (DIN EN 22719)          |
| Flammability Limits                 | No Data                                   |                         |
| Flammability (Solid, gas)           | Not Relevant                              |                         |
| Auto Ignition Temperature           | 445 °C (833 °F)                           |                         |
| Initial Boiling Point/Boiling Range | Decomposition                             |                         |
| Decomposition Temperature           | 181 °C (357 °F)                           |                         |
| Viscosity                           | Not Available                             |                         |
| Specific Gravity                    | 1.15 at 20 Degrees C                      | 9.58 +/- 0.01 Lbs./gal. |

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under recommended storage conditions.

**Conditions to Avoid:** Heat, Flames and Sparks. Protect from freezing.

**Incompatible Materials:** Avoid contact with water, amines, strong bases, alcohols and copper alloys.

### Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions, Carbon oxides, Nitrogen Oxides, Isocyanate, Isocyanic Acid, Hydrogen cyanide and dense black smoke.

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Inhalation, Skin Contact, Eye Contact  
Ingestion is not a likely route of exposure under normal working conditions.

**Symptoms of Exposure:**  
May cause allergic skin reaction, Harmful if inhaled, May cause allergy or asthma symptoms or breathing difficulties if inhaled, May cause respiratory irritation, May cause eye irritation

**Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**  
May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled

**Carcinogenicity:**  
Product is not expected to be carcinogenic.

**Other Chronic Effects: None Known**

**Numerical Measures of Toxicity**  
Homopolymer of Hexamethylene Diisocyanate: Oral LD50: Rat, >5,000 mg/kg; Dermal LD50: Rabbit, >2,000 mg/kg; Inhalation LC50 Rat 4 hrs.0.39 mg/l, Skin Irritation Rabbit: Slight, Eye Irritation Rabbit: Slight, Sensitization Mouse: Sensitizer.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Material may be toxic to aquatic organisms. .

**Acute Toxicity: Fish**  
Components:  
Homopolymer of Hexamethylene Diisocyanate: LC50 Zebra Fish, 96 hr, >100 mg/l

**Acute Toxicity: Aquatic Invertebrates**  
Components:  
Homopolymer of Hexamethylene Diisocyanate: EC50 Water Flea, 48 hr, >100 mg/l

**Acute Toxicity: Aquatic Plants**  
Components:  
Homopolymer of Hexamethylene Diisocyanate: ErC50 Scenedesmus Subspicatus, 72 hr, 199 mg/l

**Acute Toxicity: Microorganisms**  
Components:  
Homopolymer of Hexamethylene Diisocyanate: EC50 Activated Sludge, 3 hr, >10,000 mg/l

**Persistence and Degradability:**  
Homopolymer of Hexamethylene Diisocyanate: Biodegradation: aerobic, 2%, Exposure time: 28 days, i.e. not readily degradable

**Bioaccumulation:** Homopolymer of Hexamethylene Diisocyanate hydrolyzes rapidly in water. Accumulation in aquatic organisms is not to be expected.

**Mobility:** No data available.

**Other Adverse Effects:** No Data Available

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

**Disposal of Wastes:** Under RCRA 40 CFR 261 this material is a hazardous waste. Dispose of in accordance with all federal, state, and local regulations. If uncertain of local requirements, contact the proper environmental authorities for information on waste disposal in your area. Contact a licensed professional waste disposal service to dispose of this material. Incineration is preferred method of disposal.

**Contaminated Packaging:** Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### **DOT**

Not Regulated

#### **IATA**

Not Regulated

#### **IMDG**

Not Regulated

Marine Pollutant: No

### 15. REGULATORY INFORMATION

#### International Inventories

**TSCA:** All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

#### US Federal Regulations

**SARA 302:** None

**SARA 311/312 Hazard Categories:** Acute: Yes, Fire: Yes, Chronic: Yes

**SARA 313 Hazard Categories:**

| <u>CAS Number</u> | <u>Component Name</u> | <u>Wt. %</u> |
|-------------------|-----------------------|--------------|
|-------------------|-----------------------|--------------|

**None Known**

#### **SARA Extremely Hazardous Substances (EHS)/CERCLA hazardous Substances**

Hexamethylene-1,6-Diisocyanate (HDI) CERCLA/SARA RQ 100 lbs. (20,005 lbs. of Green-Thane Clear Pt B)

**CWA (Clean Water Act):** None Known

#### Supplemental State Compliance Information

##### **California:**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm. **None Known**

#### **States Right To Know:**

| <u>Component</u>   | <u>CAS#</u> | <u>Wt. %</u> | <u>State</u>             |
|--|-------------|--------------|--------------------------|
| Homopolymer of Hexamethylene Diisocyanate                                | 28182-81-2  | 60-100%      | New Jersey, Pennsylvania |
| Hydrophilic Aliphatic Polyisocyanate based on Hexamethylene Diisocyanate | 666723-27-9 | 15-25%       | New Jersey, Pennsylvania |
| Hexamethylene-1,6-Diisocyanate   | 822-06-0    | 0.1-1.0%     | New Jersey, Pennsylvania |
| N,N-dimethylcyclohexylamine  | 98-94-2     | 0.1-1.0%     | New Jersey, Pennsylvania |

**U.S. EPA Label Information:** No Data

**Canada**

WHMIS Classification: Class D2B (Toxic)

Symbol: Stylized T



**16. OTHER INFORMATION**

**HMIS Classification:**

Health hazard: 2

Flammability: 0

Physical Hazards: 0

**NFPA Rating:**

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

**Issuance Date: October 12, 2015**

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**Revision Note: GHS Format**

**Date of Previous Version: October 12, 2015**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**