

Date Prepared: 02/07/08
Supersedes: 06/24/02
Product Name: Duraguard 310 (Part B-Hardener)

ChemMasters

Material Safety Data Sheet

1. Chemical Product and Company Information

Product Name: Duraguard 310 CRU (Part B-Hardener)

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

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

2. Composition / Information on Ingredients

Hazardous Components	CAS #	Exposure Limits			% by Wt
		OSHA(PEL/TWA)	ACGIH (TLV/TWA)	OTHER	
Biuret of Hexamethylene Diisocyanate	4035-89-6	—	—	0.005 ppm (NIOSH)	75%
Propylene Glycol Monomethyl Ether Acetate	108-65-6	—	—	100 ppm*	25%

* recommended based on similarity to Propylene Glycol Monomethyl Ether

3. Hazards Identification

CAUTION

COMBUSTIBLE LIQUID

Causes eye irritation

Causes skin irritation and/or allergic skin reaction

Causes respiratory irritation and/or allergic respiratory reaction

Harmful if inhaled

Harmful if swallowed

Potential Health Hazards - Acute

Eye: Causes irritation. Direct contact with the liquid or exposure to its vapors may cause burning, tearing and redness. If left untreated, corneal damage can occur and injury is slow to heal.

Skin: Causes irritation. Prolonged or repeated exposure may cause redness and burning, drying and cracking of the skin and dermatitis. Persons with preexisting skin disorders may be more susceptible to the effects of this material. Sensitizer—may cause allergic reaction.

Inhalation: Excessive concentration of vapors or mists can cause irritation of the nose and throat and signs of nervous system depression. Persons with impaired lung function or asthma like conditions may experience additional breathing difficulties due to the irritating properties of this material. Sensitizer—may cause allergic respiratory reaction.

Ingestion: Liquid is moderately toxic and may be harmful if swallowed; may produce CNS depression. May result in vomiting. Aspiration of vomitus into the lungs must be avoided as even small quantities may result in aspiration pneumonitis.

Potential Health Effects - Chronic

Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage. Possible risk of skin and respiratory tract sensitization can occur to persons who have already been sensitized by other isocyanates.

Carcinogenicity:

NTP
NO

IARC Monographs
NO

OSHA Regulated
NO

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4. First Aid Measures

Eye: Immediately flush with plenty of clean water.

Skin: Remove contaminated clothing. Clean affected area(s) thoroughly with soap and water.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Seek medical attention! Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

5. Fire Fighting Measures

Flash Point (method used): 114°F (TCC)

Flammable Limits (% volume in air): **Lower** = 1.3 **Upper** = 13.1 (Propylene Glycol Monomethyl Ether Acetate)

Auto Ignition Temperature: 670--800°F

Extinguishing Media: Extinguish with dry chemical, CO₂ or foam.

Hazard Combustion Products: Carbon dioxide and carbon monoxide

Fire Fighting Instructions: Do not enter confined fire space without full bunker gear including a positive pressure, NIOSH approved, self-contained breathing apparatus. Cool containers exposed to fire with water.

6. Accidental Release Measures

Spill: Shut off all ignition sources. Absorb with inert material, then place in chemical waste container for later disposal. Decontaminate spill area for at least one (1) hour with a mixture of 50% isopropanol, 45% water and 5% concentrated ammonia solution.

7. Handling and Storage

Handling: Avoid inhalation of vapors and personal contact with product. Use with adequate ventilation. "Empty" containers can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize drums to empty them.

Storage: Store containers tightly closed with adequate ventilation in a cool, dry area.

8. Exposure Controls / Personal Protection

Exposure Controls: Mechanical and local exhaust should be used for indoor use..

Personal Protection: NIOSH approved organic solvent respirator, impervious gloves, chemical splash goggles, and protective clothing to minimize skin contact.

9. Physical and Chemical Properties

Appearance: Pale yellow to clear viscous liquid

Odor: Mild, sweet, ether like odor

Boiling Point: >300°F

Melting Point: Not applicable

Vapor Pressure (mm/Hg): >4 at 20°C

Vapor Density (Air = 1): No data available

Solubility in Water: Reacts

Specific Gravity (H₂O = 1): 1.06

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

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10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Heat, sparks and flame. Prevent exposure to water, alcohols and amines.

Incompatibility (materials to avoid): Water, strong acids, strong oxidizers, alcohols and amines.

Hazardous Decomposition or By-products: Large quantities of carbon dioxide are emitted on reaction with water, bases, alcohols and amines. On combustion, oxides of nitrogen and carbon are emitted.

Hazardous Polymerization: Will not occur

11. Toxicological Information

Components	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Biuret of HDI	>5000 mg/kg	—	—

12. Ecological Information

No data available.

13. Disposal Considerations

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.

Under RCRA 40 CFR 261 this material is hazardous waste number D001.

14. Transportation Information

For U S National Shipments <119 gal containers: Not Regulated

For U S National Shipments ≥ 119 gal containers:

Shipping Description: Paint, Combustible Liquid, UN1263, III

Hazard Class: Combustible Liquid

For Air and International Shipments:

Shipping Description: Paint, 3, UN1263, III

Hazard Class: Flammable Liquid

Emergency Response Guide Number: 128

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, fire, reactive

Section 313 reportable ingredients:

Components	CAS #	Maximum %
Not applicable	—	—

16. Other Information

MSDS Status: Reviewed 2/7/08

Industrial Abbreviation Legend on page 4 of this MSDS.

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Industrial Abbreviation Legend

ACGIH	American Conference of Governmental Industrial Hygienists	mg / m ³	milligrams per cubic meter
C A A	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	O S H A	Occupational Safety and Health Administration
C W A	Clean Water Act (EPA)	PEL	Permissible Exposure Limit
DOT	Department of Transportation	ppm	parts per million
EPA	Environmental Protection Agency	R C R A	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	T W A	Time-Weighted Average

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

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