

SAFETY DATA SHEET



Issue Date: October 30, 2014

Revision Date: October 30, 2014

Version 2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Duraguard 310CRU, Part B Hardener

Other Means of Identification:

SDS #: F5200B

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

Flammable Liquid and Vapour, May cause allergic skin reaction, Causes serious eye irritation, May cause allergy or asthma symptoms or breathing difficulties if inhaled

GHS Classification

Flammable Liquids Category 3

Eye Irritation – Category 2A

Sensitization – Respiratory – Category 1

Skin sensitization – Category 1

Label Elements, including precautionary statements

Pictograms:



Signal Word: Danger

Hazard Statements:

H226 Flammable Liquid and Vapour

H319 Causes serious eye irritation

H317 May cause allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statement(s)

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 In case of inadequate ventilation wear respiratory protection

Response:

- P303+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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire use, dry chemical, alcohol resistant foam, halon or carbon dioxide to extinguish.

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

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

Hazards not otherwise classified: None Known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component

Hexane, 1,6-diisocyanato-, homopolymer	CAS#: 28182-81-2	59.5-60%
2-methoxy-1-methylethyl Acetate	CAS#: 108-65-6	40%
Hexamethylene Diisocyanate	CAS#: 822-06-0	<0.2%

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 (or hair): 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.

Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Hazardous Combustion Products: Carbon oxides & Nitrogen oxides

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. Avoid breathing dust/fume/gas/mist/vapours/spray. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low 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, and then collect with an electrically protected vacuum cleaner or by wet-brushing 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take measures to prevent the buildup of electrostatic charge. Use non-sparking tools. 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.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component Exposure Limits

2-methoxy-1-methylethyl Acetate, CAS#: 108-65-6: TWA 50 ppm, AIHA.

Hexamethylene 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: Colourless

Odor: Solvent Odor

Odor threshold: No Data

<u>Property</u>	<u>Value</u>	<u>Remarks – Method</u>
Vapor Pressure	Not Available	
Vapor Density	Not Available	
Relative Density	Not Available	
pH:	Not Relevant	
Melting/Freezing Point	Not Relevant	
Solubility	Not Available	
Evaporation Rate	Not Available	
Flash Point	46 Degrees C (114 Degrees F)	Setaflash Closed Cup
Flammability Limits	No Data	
Flammability (Solid, gas)	Not Relevant	
Auto Ignition Temperature	Not Available	
Initial Boiling Point/Boiling Range	Not Available	
Decomposition Temperature	Not Available	
Viscosity	Not Available	
Specific Gravity	1.04 at 25 Degrees C	8.7 +/- 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

Incompatible Materials: Keep away from water, strong oxidizing agents, amines, alcohols and surface active materials.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions, Carbon and Nitrogen oxides.

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, Causes serious eye irritation, May cause allergy or asthma symptoms or breathing difficulties if inhaled

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Repeated Exposure may cause skin dryness and cracking.

Carcinogenicity:

Product is not expected to be carcinogenic.

Other Chronic Effects: None Known

Numerical Measures of Toxicity

2-methoxy-1-methylethyl Acetate: Oral LD50: Rat, 6,190 mg/kg; Dermal LD50: Rabbit, >5,000 mg/kg; Inhalation LC50 Rat 6 hrs. >4345 ppm

Hexane, 1,6-diisocyanato-, homopolymer: Oral LD50: Rat, >5,000 mg/kg; Dermal LD50: Rabbit, >2,000 mg/kg; Inhalation LC50 Rat 6 hrs. >1.8 ppm

12. ECOLOGICAL INFORMATION

Ecotoxicity: Material may be toxic to aquatic organisms. .

Acute Toxicity: Fish

Components:

2-methoxy-1-methylethyl Acetate: LC50 Fathead Minnow, 96 hr, 161 mg/l

Acute Toxicity: Invertebrates

Components:

2-methoxy-1-methylethyl Acetate: EC50 Water Flea, 48 hr, 408 mg/l

Persistence and Degradability: Solvent portion is expected to be readily biodegradable.

Bioaccumulation: No Data Available

Mobility: This material has a low solubility in water. The solvent portion has high volatility (tendency to move from water to air) and will partition rapidly to the air. Therefore chronic aquatic toxicity is not expected, however a significant spill may cause long-term adverse effects in the aquatic environment.

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.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT

UN1263, PAINT, 3, III

IATA

UN1263, PAINT, 3, III

IMDG

UN1263, PAINT, 3, III

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: No

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 Diisocyanate (HDI) CERCLA/SARA RQ 100 lbs. (500 lbs. of DG310 Pt B)

CWA (Clean Water Act): This product contains organic solvents and may be subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

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:

Hexane, 1,6-diisocyanato-, homopolymer, CAS# 28182-81-2: New Jersey, Pennsylvania
2-methoxy-1-methylethyl Acetate, CAS# 108-65-6: New Jersey, Pennsylvania

U.S. EPA Label Information: No Data

Canada

WHMIS Classification: Class D2B & B3 (Toxic & Flammable)

Symbol: Stylized T & Flammable



16. OTHER INFORMATION

HMIS Classification:

Health hazard: 1
Flammability: 2
Physical Hazards: 0

NFPA Rating:

Health hazard: 1
Fire: 2
Reactivity Hazard: 0

Issuance Date: October 30, 2014

Revision Date: October 30, 2014

Revision Note: GHS Format

Date of Previous Version: February 7, 2008

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