

Prepared: 08/29/07
Supersedes: 08/29/07
Product Name: Duraguard mMa I-Component

ChemMasters

Material Safety Data Sheet

1. Chemical Product and Company Information

Product Name: Duraguard mMa I-Component

Product Description: Bonding Agent for Duraguard 400 mMa

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	
		OSHA(PEL/TWA)	ACGIH (TLV/TWA)
Polyisocyanate Prepolymer Based on MDI	Trade Secret		
Methyl Methacrylate Monomer 80-62-6	50 ppm	50 ppm	—
4,4'-Diphenylmethane Diisocyanate (MDI)	101-68-8	0.02 ppm	0.005 ppm
Polymeric Diphenylmethane Diisocyanate (pMDI)	9016-87-9	NA	NA
Distillates, Petroleum hydrotreated paraffinic	64742-55-8	NA	NA
Diphenylmethane Diisocyanate (MDI) Mixed Isomers	26447-40-5	NA	NA

3. Hazards Identification

WARNING!

FLAMMABLE LIQUID

Causes eye irritation with possible corneal injury.

Overexposure may cause skin irritation or burns, central nervous system effects, liver damage and respiratory sensitivity

Potential Health Hazards - Acute

Eye: Direct contact may cause severe irritation with corneal injury. Vapors may cause irritation and tearing.

Skin: : Repeated skin exposure may result in absorption of harmful amounts, may also cause irritation, defatting and possible burns.

Inhalation: May cause CNS effects and irritation.

Ingestion: Amounts ingested incidental to industrial use is not likely to cause injury.

Potential Health Effects - Chronic

May cause skin and respiratory sensitization and/or disorders. Liver malfunctions.

Carcinogenicity:

NTP
No data available

IARC Monographs
No

OSHA Regulated
No data available

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4. First Aid Measures

Eye: Immediately flush with plenty of clean water for at least 15 minutes. Seek medical attention.

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. Give victim plenty of water or milk.

SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST

5. Fire Fighting Measures

Flash Point (method used): 53°F (TCC)

Flammable Limits (% volume in air): **Lower** = 1.1 **Upper** = 6.1

Auto Ignition Temperature: No data available

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

Hazard Combustion Products: Hazardous conditions will result through contamination with incompatibles or exposure to excessive temperatures. Product can decompose with force if confined during exposure to fire.

Fire Fighting Instructions: Flammable. 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: Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Avoid personal contact. If spill is indoors, ventilate area. Keep out of drains, sewers or waterways. Take up with absorbent material, place into non-leak containers and seal tightly for proper disposal.

7. Handling and Storage

Handling: Flammable. Static electricity may create a fire hazard. Always ground equipment and transfer containers. Keep liquid away from heat, sparks and flame. "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. Avoid inhalation of vapors and personal contact with product. Use only with adequate ventilation.

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.

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9. Physical and Chemical Properties

Appearance: Clear liquid
Odor: Methacrylate
Boiling Point: 293°F
Melting Point: Not applicable
Vapor Pressure (mm/Hg): No data available
Vapor Density (Air = 1): >1
Solubility in Water: Negligible (<5%)
Specific Gravity (H₂O = 1): 1.06
Evaporation Rate (n-Butyl Acetate = 1): <1

10. Stability and Reactivity

Chemical Stability: Stable
Conditions to Avoid: Heat, flame, contaminants. Corrosive to copper and alloys. Dissolves rubber.
Incompatibility (materials to avoid): Strong acids, oleum, aluminum chloride, oxidizers, pure oxygen.
Hazardous Decomposition or By-products: Acrid fumes emitted upon decomposition. Incomplete combustion will produce unknown toxic substances.
Hazardous Polymerization: Could occur under normal conditions. Store at room temperature.

11. Toxicological Information

Components	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Methyl Methacrylate	5000 mg/kg	—	—

12. Ecological Information

Possible land, air and water pollutant. No exact 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. Preferred method of disposal is incineration.

14. Transportation Information

For U S National, Air and International Shipments:
Shipping Description: Resin Solution, 3, UN1866, II
Emergency Response Guide Number: 127
Hazard Class: Flammable Liquid

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15. Regulatory Information

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

CERCLA Reportable Quantity: 2000 lbs

SARA Title III:

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

Section 313 reportable ingredients:

Components	CAS #	Maximum %
Methyl Methacrylate	80-62-6	66 %
4,4'-Diphenylmethane Diisocyanate (MDI)	101-68-8	7%
Polymeric Diphenylmethane Diisocyanate (pMDI)	9016-87-9	4%

16. Other Information

MSDS Status: New 08/29/07

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

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