

Date Prepared: 6/1/98
 Supersedes: All Previous
 Product Name: Duraflow 250 (Part B-Hardener)

1. Chemical Product and Company Information

Product Name: Duraflow 250 (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	
m-xylene diamine	84852-15-3	0.1 mg/m ³ (ceiling)*	0.1 mg/m ³ (ceiling)*	—	—
Triethylenepentamine*	112-57-2	—	1.0 ppm	—	<5%

* Tetraethylenepentamine (TEPA) as reported here is a complex mixture of TEPA and other ethyleneamines. Some of these amines include Triethylenetetramine (112-24-3) and Diethylenetriamine (111-40-0). The ACGIH has established a TLV of 1 ppm for airborne concentrations of Diethylenetriamine with a skin hazard notation.

3. Hazards Identification

WARNING

CORROSIVE LIQUID

Causes eye burns

Causes skin burns and/or allergic skin reaction

May cause allergic respiratory reaction

Potential Health Hazards - Acute

Eye: May cause chemical burn — damage irreversible.

Skin: Sensitizer — may cause allergic reaction which can be severe in certain individuals. Moderately toxic, may cause chemical burns.

Inhalation: May cause headaches, nausea, dizziness and respiratory irritation. Sensitizer — may cause allergic respiratory reaction.

Ingestion: No specific information available. Moderately toxic. May cause gastrointestinal irritation, ulceration and/or burns of mouth and throat.

Potential Health Effects - Chronic

Overexposure may cause CNS depression and/or lung damage.

Carcinogenicity:

NTP

NO

IARC Monographs

NO

OSHA Regulated

NO

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4. First Aid Measures

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

Skin: Flush immediately with plenty of water for at least 15 minutes while removing contaminated clothing.

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

Ingestion: Do NOT induce vomiting. Give victim a glass of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST

5. Fire Fighting Measures

Flash Point (method used): >200°F (TCC)

Flammable Limits (% volume in air): **Lower** = Not applicable **Upper** = Not applicable

Auto Ignition Temperature: Not applicable

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

Hazard Combustion Products: Carbon dioxide, carbon monoxide and/or oxides of nitrogen.

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 dry, well ventilated area.

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: Protective clothing, chemical splash goggles, rubber gloves and a vapor respirator.

9. Physical and Chemical Properties

Appearance: Amber gel or liquid

Odor: Ammoniacal odor

Boiling Point: >477°F

Melting Point: Not applicable

Vapor Pressure (mm/Hg): No data available

Vapor Density (Air = 1): >1

Solubility in Water: Partially

Specific Gravity (H₂O = 1): 0.99

Evaporation Rate (n-Butyl Acetate = 1): Not applicable

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10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Excessive heat

Incompatibility (materials to avoid): Contamination with strong acids, bases, epoxy resins or isocyanates can cause polymerization.

Hazardous Decomposition or By-products: Thermal decomposition may include carbon monoxide, carbon dioxide and/or oxides of nitrogen.

Hazardous Polymerization: Will not occur

11. Toxicological Information

Components

**Oral LD50
(rat)**

**Dermal LD50
(rabbit)**

**Inhalation LC50
(rat)**

Triethylenepentamine

>500 mg/kg

>2000 mg/kg

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12. Ecological Information

No data available

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.

Under RCRA 40 CFR 261 this material is hazardous waste number D002.

14. Transportation Information

For U S National Shipments

Shipping Description: Corrosive Liquid N.O.S. (Modified Polyamidoamine), 8, UN1760, III

Emergency Response Guide Number: 60

Hazard Class: Corrosive

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:

Components

CAS #

Maximum %

Not applicable

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16. Other Information

MSDS Status: New

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
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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