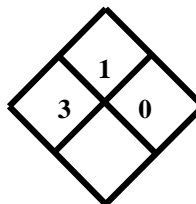


P.O. Box 4980
The Woodlands, TX 77387-4980

8 am to 5 pm Phone: (800) 257-5547
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International Emergency Phone: (409) 727-0831
Asia Pacific Emergency Phone: (65) 6336-6011

Effective Date: 10/31/08**Material Safety Data Sheet**

MSDS No: 6335

1. PRODUCT IDENTIFICATION**Trade Name:** XMH 8579 Hardener**Chemical Family:** Amine

NFPA RATING

| | |
|-----------------------------|-----------|
| Health: | 3* |
| Flammability: | 1 |
| Reactivity: | 0 |
| Personal Protection: | |

HMIS RATING

Synonyms:

LSA 642-03 Hardener

Intended Use or Product Type: Epoxy adhesive hardener**2. COMPOSITION / INFORMATION ON INGREDIENTS**

| O S H A | CAS No. | CHEMICAL IDENTITY | EXPOSURE LIMITS | | | | CARCINOGEN STATUS | | | |
|------------------|------------|--|-----------------|------|------|------|-------------------|------|-----|------|
| | | | ACGIH | | OSHA | | MFR. | IARC | NTP | OSHA |
| | | | TWA | STEL | PEL | STEL | | | | |
| * | 10563-29-8 | 1,3-Propanediamine, N'-(3-aminopropyl)-N,N-dimethyl-Dimethylene Propylene Triamine Common Name: Concentration | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 111-40-0 | 1,2-Ethanediamine, N-(2-aminoethyl)-Diethylenetriamine Common Name: Concentration | 1 ppm | NE | NE | NE | NE | NR | NR | NR |
| * | 112-24-3 | 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-Triethylenetetramine Common Name: Concentration | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 68082-29-1 | Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine Polyamide Resin Common Name: Concentration | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 80-05-7 | Phenol, 4,4'-(1-methylethylidene)bis- Common Name: Concentration | NE | NE | NE | NE | TLV 5 mg/m3 | NR | NR | NR |

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| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

* = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Corrosive - causes skin and eye burns. Causes irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

Acute Exposure: Corrosive. Causes skin and eye burns.

Chronic: Overexposure may have effects on developing fetus.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Corrosive - causes skin and eye burns. Causes irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

Medical Conditions Aggravated by Exposure: Skin, eye and pulmonary conditions.

Additional Information: Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

Flash Point: > 200°F (> 93 °C)

Flash Point Method Used: Estimated

Flammable Limits in Air (Lower - % by volume): Not established

Flammable Limits in Air (Upper - % by volume): Not established

Fire Fighting Extinguishing Media: Carbon dioxide, dry chemical, foam, water.

Fire Fighting Equipment: Use self-contained breathing apparatus.

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

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6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Signal Word: Danger!

Precautions: Corrosive - causes skin and eye burns. Causes irritation if inhaled and can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or mist. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Overexposure may have effects on developing fetus.

Other Handling Information: Nuisance dust may be generated when sanding or sawing cured material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin Protection: Wear impermeable gloves.

Respiratory Protection: Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection: Wear splash-proof chemical goggles.

Engineering Controls: General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|------------------|
| Color: | Grey |
| Physical State: | Paste |
| Solubility in Water: | Moderate |
| Vapor Pressure: | Not Determined |
| Specific Gravity: | 1.65 (water = 1) |
| Boiling Point: | Not Determined |
| Melting Point: | Not Determined |
| Evaporation Rate: | Not Determined |
| Density: | Not Determined |
| Vapor Density: | Not Determined |
| pH: | Not Determined |
| Coefficient of water/oil: | Not Determined |

Percent Volatile: Not determined.

10. STABILITY AND REACTIVITY

Conditions to Avoid: Excessive heat for prolonged periods of time.

Stability: Stable.

Incompatibility: Strong oxidizers, acids and bases.

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Hazardous Decomposition Products: Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).

Diethylenetriamine= 1080 - 2330 mg/kg (rat)

Dimethylene propylene triamine= 1670 mg/kg (rat)

Triethylenetetramine= 2500 - 4340 mg/kg (rat)

Acute Dermal Toxicity (LD50): Component(s) are toxic, 200 - 1000 mg/kg (rabbit).

Triethylenetetramine= 550 - 800 mg/kg (rabbit)

Diethylenetriamine= 672 - 1240 mg/kg (rabbit)

Dimethylene propylene triamine= 1310 mg/kg (rabbit).

Acute Inhalation Exposure Effects: Respiratory irritant.

Sensitization: Causes allergic skin and respiratory sensitivity in some people.

Skin Irritation: Corrosive. Causes burns.

Eye Irritation: Corrosive. Causes burns.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT: Non-Bulk

| | |
|---|---|
| Proper Shipping Name: | Polyamines, liquid, corrosive, N.O.S. |
| Technical Shipping Name (If n.o.s.): | Dimethyl dipropyl triamine, Diethylene triamine |
| Hazard Class: | 8 |
| ID Number: | UN 2735 |
| Packing Group: | PG II |
| Label: | Corrosive |

IATA: Non-Bulk

| | |
|---|---|
| Proper Shipping Name: | Polyamines, liquid, corrosive, N.O.S. |
| Technical Shipping Name (If n.o.s.): | Dimethyl dipropyl triamine, Diethylene triamine |
| Hazard Class: | 8 |
| ID Number: | UN 2735 |
| Packing Group: | PG II |
| Label: | Corrosive |

IMDG: Non-Bulk

| | |
|---|---|
| Proper Shipping Name: | Polyamines, liquid, corrosive, N.O.S. |
| Technical Shipping Name (If n.o.s.): | Dimethyl dipropyl triamine, Diethylene triamine |

Effective Date: 10/31/08

| | |
|---|---|
| Hazard Class: | 8 |
| ID Number: | UN 2735 |
| Packing Group: | PG II |
| Label: | Corrosive |
| TDG: Non-Bulk | |
| Proper Shipping Name: | Polyamines, liquid, corrosive, N.O.S. |
| Technical Shipping Name (If n.o.s.): | Dimethyl dipropyl triamine, Diethylene triamine |
| Hazard Class: | 8 |
| ID Number: | UN 2735 |
| Packing Group: | PG II |
| Label: | Corrosive |

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261) but handle with care due to corrosive effect on skin and eyes.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product contains a toxic chemical(s) for routine annual toxic chemical release reporting under section 313 (40 CFR 372). This information must be included in all MSDS's copied or distributed for this material.

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-
 Common Name: Bisphenol A
 Percent in Composition: 1 - 5 % by wt
 Comment:

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

International Regulations:

Canadian Inventory Status: This product contains one or more chemicals currently not on the Canadian Domestic Substance List.

Canadian WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D1B D2A D2B E

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Effective Date: 10/31/08

Chemical Name: Quartz (SiO₂)
Common Name: Crystalline silica
CAS Number: 14808-60-7
Percent in Composition: 0.0898 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Formaldehyde
Common Name: Formaldehyde
CAS Number: 50-00-0
Percent in Composition: 0 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Sulfuric acid, barium salt (1:1)
Common Name: Barium Sulfate
CAS Number: 7727-43-7
Comment: Hazardous Substance

Chemical Name: Fatty acids, C18-unsatd., dimers, polymers with tall-oil fatty acids and triethylenetetramine
Common Name: Polyamide Resin
CAS Number: 68082-29-1
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Bentonite
CAS Number: 1302-78-9
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,3-Propanediamine, N'-(3-aminopropyl)-N,N-dimethyl-
Common Name: Dimethylene Propylene Triamine
CAS Number: 10563-29-8
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Ethanediamine, N-(2-aminoethyl)-
Common Name: Diethylenetriamine
CAS Number: 111-40-0
Comment: Hazardous Substance

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-
Common Name: Bisphenol A
CAS Number: 80-05-7
Comment: Environmental Hazardous Substance

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-
Common Name: Triethylenetetramine
CAS Number: 112-24-3
Comment: Hazardous Substance

16. OTHER INFORMATION

MSDS No: 6335
Approved By: Dianne Blessing
Title: EH&S Specialist

Effective Date: 10/31/08

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