

Manufactured by:



354 West Street, West Bridgewater, MA 02379
Phone: (508) 587-4502 Fax: (508) 587-4514

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076
Phone: (603) 635-2800 Fax: (603) 635-1900

MATERIAL SAFETY DATA SHEET

1. Product and Company Information

Product Name: A-4 Hardener

Product Description: Liquid Epoxy Hardener

Company: Cast-Coat, Inc. 354 West Street, West Bridgewater, MA 02379

Telephone: (800) 527-4502 or (508) 587-4502

Emergency Contact: CHEMTREC (800) 424-9300 (domestic) or (703) 527-3887 (international)

2. Composition/Information on Ingredients

<u>Components</u>	<u>CAS #</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH PEL</u>
Trioxatridecanediamine	4246-51-9	>90	none established	

3. Hazards Identification

Eye Contact: Corrosive to the eyes and may cause severe damage, including blindness. Vapors may be irritating.

Skin Contact: Corrosive to the skin. May cause skin sensitization. May be toxic if absorbed through the skin.

Inhalation: Vapors / mists may be corrosive to the upper respiratory tract. Repeated or prolonged exposure can result in lung damage.

Ingestion: Not expected to be a relevant route of exposure, however, corrosive and may cause severe and permanent damage to the mouth, throat and stomach.

Aggravated Medical Conditions: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product. Pre-existing respiratory and skin allergies may be increased from exposure to this product.

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 WAKEFIELD
Thermal Solutions

4. First Aid Measures

General Advise: Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking.

Eye Contact: Immediately flush eyes with water for at least 30 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing and wipe excess from skin. Promptly wash with soap and water for 15 minutes. Seek medical attention if irritation persists.

Inhalation: Move to fresh air and provide oxygen if necessary.

Ingestion: Do not induce vomiting. If conscious, give one glass of water. Seek medical attention.

5. Fire-Fighting Measures

Extinguishing Media: Water fog or “alcohol foam”

Protective Equipment: Do not enter confined space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots). Use self contained, positive pressure breathing apparatus.

Specific Hazards: Not applicable

6. Accidental Release Measures

Personal Protection: Eyes - Wear splash proof chemical goggles.

Skin - Wear impervious gloves and protective clothing to prevent skin contact.

Inhalation: Use NIOSH approved respirator suitable for organic vapors.

Environmental Concerns: Construct a dike to prevent from entering sewers, rivers and waterways.

Clean Up: Soak up residue with absorbent material and shovel into non-leaking containers.

7. Handling and Storage

Handling: Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking. Wear splash proof chemical goggles, impervious gloves and protective clothing to prevent skin contact. Emergency eye wash stations should be readily accessible.

Ventilation: Provide effective mechanical exhaust. Wear NIOSH approved respirator suitable for organic vapors in the absence of ventilation.

Storage: Store in a cool, dry location in tightly sealed containers. Keep away from open flame and high temperatures. Do not pressurize containers to empty them.

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8. Exposure Controls/Personal Protection

Engineering Measures: Provide readily accessible eye wash stations. Provide effective mechanical exhaust.

Personal Protective Equipment:

Eyes - Wear splash proof chemical goggles.

Skin - Wear impervious gloves. Wear protective clothing to prevent skin contact.

Inhalation - Wear NIOSH approved respirator suitable for organic vapors in the absence of ventilation.

Comments: Promptly remove contaminated clothing and wash them before re-using. Destroy contaminated leather and absorbent shoes.

9. Physical and Chemical Properties

Appearance: Liquid

Color: Clear to Amber

Odor: Amine

Specific Gravity: 1.01

Vapor Pressure: < 1.00 mmHg at 20° C

Solubility in Water: Miscible

Flashpoint: 139° C

10. Stability and Reactivity

Stability: Stable under normal conditions.

Materials to Avoid: Avoid heat, flame and strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrous oxide.

Comments: Hazardous polymerization will not occur.

11. Toxicological Information

Acute Health Hazard:

Ingestion:	LD50	3160 mg / kg	species: rat
Skin:	LD50	2500 mg / kg	species: rabbit
Inhalation:	LC50	not lethal, 4 hour	species: rat

Chronic Health Hazard: There are no known chronic effects associated with this material.

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12. Ecological Information

Inherent Biodegradability: Zahn-Wellens - < 20 % (Difficult to eliminate)
Golden Orfe, Static 96 hour LC50 - 220-460 mg / L (Practically nontoxic)
Daphnid, Static 48 hour EC50 - 220 mg / L (Practically nontoxic)
Acute algal toxicity, 72 hour EC50 - 69 mg / L (Test rating not found)
Toxicity to bacteria - EC50, 17H=220 mg / L (Test rating not found)

13. Disposal Considerations

Comments: Dispose of in accordance with federal, state and local regulations. Incinerate or bury in a RCRA licensed facility.

14. Transportation Information

D.O.T. Classification: Amines, Liquid, Corrosive, N.O.S.
(Trioxatridecanediamine)
8, UN 2735, II

Emergency Response Guide: 153

15. Regulatory Information

TSCA Inventory Status: Listed on Inventory - Yes

RCRA Hazardous Waste Number : D002

CERCLA : No Reportable Quantity : No

State Regulatory Information

<u>Component</u>	<u>CAS #</u>	<u>%</u>	<u>State Code</u>
Trioxatridecanediamine	4246-51-9	>90	NJ, MA, PA,

MA = Massachusetts substance list

PA = Pennsylvania hazardous substance list

NJ = New Jersey hazardous substance list

This product is hazardous or contains components which are hazardous according to the OSHA Communication Standard.

Hazard Ratings:

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>
HMIS	3	1	0

WHMIS Classification: This product is classified as a Class E - Corrosive material.

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16. Other Information

The information and / or percentages in this MSDS are not intended for use in preparing specifications. Please contact Cast-Coat, Inc. before writing specifications.

All information appearing herein is based upon data obtained from the manufacturer and / or recognized technical sources. While the information is believed to be accurate, Cast-Coat makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of Cast-Coat and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their purposes.

Prepared by: Robert S. Lothrop

Title: Technical Director

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