

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **EC-21 Hardener**

CHEMICAL FAMILY: Polyamines

MFR'S NAME: Jeffco Products, 5252 Kearny Villa Way, San Diego, CA 92123

EMERGENCY PHONE: 800/535-5053(Infotrac) GENERAL INFORMATION: 858/576-9900(Jeffco)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS #	EXPOSURE LIMITS
Polyethylenepolyamine	<75	029320-38-5	N/E
Triethylenetetramine	<10	112-24-3	N/E
Proprietary ingredients	>15	Trade secret	N/E

Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Epoxy hardener solution. Certain individuals may have pre-existing skin or respiratory conditions causing a sensitivity or allergy which manifests as various reactions. Heating or spraying this product or the mixed parts increases potential health hazards. Health and Safety personnel should examine handling procedures and remedy existing and potential health and safety hazards.

POTENTIAL HEALTH EFFECTS:

EYE:

- May cause severe irritation.

SKIN:

- May cause irritation.

INGESTION:

- May inflame or damage the G.I. tract. Ingestion may be harmful.

INHALATION:

- May cause irritation.

CHRONIC EFFECTS:

- Repeated exposure may cause irritation and sensitization.

SIGNS & SYMPTOMS:

- Skin rash, irritation, reddening, or eczema; Breathing irritation or difficulty.

Section 4: FIRST AID MEASURES

◆USE APPROPRIATE BLOOD-BORNE PATHOGENS PROTECTIONS◆

EYE:

- Hold eyelids apart and flood with copious amounts of water. Seek medical attention.

SKIN:

- Remove excess product. Wash thoroughly with soap and water. If irritation persists, seek medical attention.

INGESTION:

- Do not induce vomiting unless directed by medical personnel. Seek medical attention.

INHALATION:

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- Remove to fresh air. Seek medical attention.

Section 5: FIRE FIGHTING MEASURES

FLASH POINT: >250°F UEL: N.D.A. LEL: N.D.A. VAPOR DENSITY: N.D.A.
NFPA FLAMMABILITY RATING: 1 AUTOIGNITION: N.D.A.
COMBUSTION PRODUCTS: CO, CO₂, NO_x, & misc. hydrocarbons
SPECIAL HAZARDS: Firefighters should wear butyl rubber boots, gloves, and body suit with SCBA. May generate toxic and irritating combustion products. Use DOT Response Guide #153.
EXTINGUISHING MEDIA: Use foam, CO₂, dry chemical, water fog.
FIRE FIGHTER INSTRUCTIONS: Stay upwind. Wear at least full bunker gear and SCBA.

Section 6: ACCIDENTAL RELEASE MEASURES

Isolate spill area. Keep out of sewer and storm drains. Stop the leak and contain the spill. Vacuum, scoop, or absorb spill with non-combustible materials. Clean up spill residues with soap and water.

Section 7: HANDLING AND STORAGE

Avoid skin and eye contact and breathing vapors by appropriate measures. Do not eat or smoke while handling this product. Wash thoroughly with soap and water after handling or exposure to this product.

Store in original sealed container at ambient temperatures (65°-80°F) in dry, well-ventilated areas.

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

For Personal exposure Limits (PEL), Threshold Limit Values (TLV), or other exposure limits, see Sec.2.
GENERAL: Provide adequate ventilation that will keep airborne concentration at a minimum.
EYE/FACE: Safety glasses or splash goggles with face shield.
SKIN: Chemical resistant gloves. Don chemical resistant clothing where exposure may occur.
RESPIRATORY: NIOSH approved respirator with organic vapor/HEPA filter cartridges.
OTHER: Decontaminate or discard clothing and materials that have come in contact with this product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: amber	ODOR: faint amine	PHYSICAL STATE: liquid
pH: alkaline	VAPOR PRESS: N.D.A.	VAPOR DENSITY: N.D.A.
BOILING PT: N.D.A.	MELT PT: N/A	SOLUBILITY IN H ₂ O: slightly
		SPECIFIC GRAVITY: 1.01

Section 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.
INCOMPATIBILITY: Strong oxidizers, acids, epoxy resins in uncontrolled conditions; contact with other unpolymerized monomers or polymers.
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: None known, other than Sec. 5's Combustion Products.

Section 11: TOXICOLOGICAL INFORMATION

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Oral: N.D.A.
Dermal: N.D.A.
Inhalation: N.D.A.
Carcinogens under OSHA, ACGIH, NTP, IARC, or Other: None \geq 0.1%.

Section 12: ECOLOGICAL INFORMATION

N.D.A.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable federal, state, and local laws and regulations.

Section 14: TRANSPORT INFORMATION

DOT: Not Regulated
IATA:
IMO:

Section 15: REGULATORY INFORMATION

OSHA: 1910.1200 Hazardous Chemical "Irritant", "Sensitizer".
TSCA: Contains listed ingredients.
SARA III: Sec311 & 312 Immediate Health Hazard; Sec313 Chemicals above de minimus level: None.
CA PROP. 65 NOTICE: Not listed.
VOLATILE ORGANIC COMPOUND (VOC) %: Zero.
NFPA: HEALTH 2 FIRE 1 REACTIVITY 0 OTHER N/A

Section 16: CANADIAN REGULATORY INFORMATION

WHMIS: Hazard Classification: Class D2B Skin Sensitizer. Refer to MSDS for specific warnings.
WHMIS Symbols: Stylized T.
Trade Secrets: N/A.
Hazardous Products Act Information: This product MSDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 13 and 14).

ABBREVIATIONS: N/A = not applicable; N.D.A. = no data available; NE = not established

END OF MSDS

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