

MATERIAL SAFETY DATA SHEET (MSDS)

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **RHINO™ 399 Accelerator Epoxy Curing**

CHEMICAL FAMILY: Aliphatic Mixture of alkanolamine, piperazine

MFR'S NAME: Rhino Linings, 9151 Rehco Road, San Diego, CA 92121

EMERGENCY PHONE: 800/424--9300 (Chemtrec) GENERAL INFORMATION: 858/410-6044 (Rhino)

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT	%	CAS #	EXPOSURE LIMITS
Triethanolamine	65-79	102-71-6	5 mg/m ³ TWA-ACGIH
Piperazine	20-35	110-85-0	N/E
N-aminoethylpiperazine	10-20	140-31-8	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 professionals should examine all handling procedures and remedy any health and safety hazards.

POTENTIAL HEALTH EFFECTS:

EYE:

- May cause severe irritation.

SKIN:

- May cause moderate irritation.

INGESTION:

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

INHALATION:

- May cause severe irritation.

CHRONIC EFFECTS:

- Repeated exposure may cause irritation or 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:

- Remove to fresh air. Seek medical attention.

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Section 5: FIRE FIGHTING MEASURES

FLASH POINT: 90°C 194°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 the spill area. Keep out of sewer and storm drains. Stop the leak and contain the spill. Vacuum, scoop, or absorb spilled with non-combustible materials. Clean 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: Butyl or nitrile rubber chemical 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: Light yellow liquid

ODOR: Not determined

PHYSICAL STATE:

VAPOR PRESS: Not determined

SPECIFIC GRAVITY: 1.09

pH: 12.3(Basic)

BOILING PT: N.D.A.

MELT PT: N/A

SOLUBILITY IN H₂O: >10

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: LD50 3.30 g/kg (rat) slight toxic
Dermal: LD50 > 2.00 g/Kg (rabbit) practically non-toxic
Inhalation: Not determined
Carcinogens under OSHA, ACGIH, NTP, IARC, or Other: None ≥ 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: Corrosive, Liquid, Basic Organic, n.o.s. (Piperazine), 8, UN 3267, PGIII.
IATA: Regulated.
IMO: Regulated.

Section 15: REGULATORY INFORMATION

OSHA: 1910.1200 Hazardous Chemical "Irritant", "Sensitizer".
TSCA: Contains listed ingredients.
SARA III: Sec311 & 312 Immediate Health Hazard; Sec313 Chemical above de minimus level: Phenol.
CA PROP. 65 NOTICE: Not listed.
NFPA: HEALTH 2 FIRE 2 REACTIVITY 0 OTHER N/A

Section 16: CANADIAN REGULATORY INFORMATION

WHMIS: Hazard Classification: Class D Division 2A, Class D Division 2B.
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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