



# MATERIAL SAFETY DATA SHEET

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** EPY-150 Hardener

November 29, 2005

Vishay Micro-Measurements  
Post Office Box 27777  
Raleigh, NC 27611

**MSDS #** MGM099A

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)  
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

## SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER	CHEMICAL IDENTITY	%
111-40-0	Diethylenetriamine	5-15
68410-23-1	Fatty Acids	20-30
NA	Proprietary Epoxy Polyamine Adduct	15-25
NA	Polyamide Polymer	40-50
NA	Non-hazardous Ingredients	<5

## SECTION 3: HEALTH HAZARD DATA

### Routes of Entry:

**Inhalation:** Yes    **Skin:** Yes    **Ingestion:** Accidental

**Health Hazards (Acute and Chronic):** Repeated contact or breathing of vapors may cause irritation; material is also a strong sensitizer.

**Carcinogenicity:**  
NTP: Not listed  
IARC Monographs: Not listed  
OSHA Regulated: Not listed

**Signs and Symptoms of Exposure:**

**INHALATION:** Repeated breathing of vapors may cause irritation.

**EYE CONTACT:** Eye contact may cause transient irritation.

**SKIN CONTACT:** Skin contact may cause transient irritation. Repeated contact may cause irritation. Material is a strong sensitizer.

**INGESTION:** Unknown.

**Conditions Generally Aggravated by Exposure:** Unknown.

**SECTION 4: EMERGENCY AND FIRST AID PROCEDURES**

**INHALATION:** Remove to fresh air.

**EYE CONTACT:** Flush with water for 15 minutes. Consult physician.

**SKIN CONTACT:** Wash with soap and water. Remove contaminated clothing.

**INGESTION:** No known antidote but give milk or water. Do NOT induce vomiting if swallowed. Get medical attention.

**SECTION 5: FIRE AND EXPLOSION HAZARD DATA**

**Flash Point (Method Used):** >200°F (93.3°C) Setaflash

**Flammable limits:** LEL: N/A UEL: N/A

**Extinguishing Media:** Dry chemical, chemical foam, carbon dioxide, water.

**Special Firefighting Procedures:** Avoid breathing smoke. Addition of water may reduce flame intensity.

**Unusual Fire and Explosion Hazards:** Toxic gases may be liberated; handle as combustible. Store in a cool place.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Steps to be taken if material is released or spilled:** Prevent skin and eye contact. Soak up in absorbent material, or scrape up and transfer to disposal container. Wipe up remaining residue with solvents, observing solvent flammability cautions, or use detergents.

**SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION**

**Respiratory Protection:** Air supplied or organic canister, mask in confined areas.

**Ventilation:** Local or mechanical exhaust recommended.

**Protective Gloves:** Chemical resistant gloves required.

**Eye Protection:** Safety glasses or goggles.

**Other Protective Clothing or Equipment:** As required to prevent contact.

**Work / Hygienic Practices:** Eye wash station and emergency shower should be available.

**SECTION 8: HANDLING AND STORAGE**

**Precautions to be taken in handling and storing:** Store in cool place in closed containers.

**Other Precautions:** Prevent skin and eye contact. Avoid breathing vapors.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	>300°F (148.9°C)
<b>Vapor Pressure (mmHg):</b>	<1
<b>Vapor Density (Air = 1):</b>	Not determined
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	1.1
<b>Melting Point:</b>	Unknown
<b>Evaporation Rate (BuAc = 1):</b>	Not determined
<b>Volatile Organic Compounds:</b>	Not determined
<b>Solubility in Water:</b>	Partial

**Appearance and Odor:** Clear, light amber liquid, low viscosity liquid, ammoniacal odor.

**SECTION 10: STABILITY AND REACTIVITY DATA**

**Stability:** Stable.

**Conditions to Avoid:** Avoid contact with metals corroded by liquid amines. Avoid high temperatures.

**Incompatibility (Materials to Avoid):** Strong acids, bases, strong oxidizing agents, chlorinated compounds, exotherms when used to cure epoxy resin.

**Hazardous Decomposition or By-products:** Carbon monoxide, carbon dioxide, aldehydes, phenol.

**Hazardous Polymerization:** Will not occur.

<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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EPY-150 Hardener

OSHA PEL:	Not established
ACGIH TLV:	Not established
OTHER:	ORAL LD <sub>50</sub> >1080 mg/kg DERMAL LD <sub>50</sub> >1090 mg/kg

<b>SECTION 12: DISPOSAL CONSIDERATIONS</b>
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**Waste Disposal Method:** Dispose of in accordance with local, state, and federal environmental regulations.

<b>SECTION 13: TRANSPORTATION INFORMATION</b>
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SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Corrosive Liquid, N.O.S. (Diethylenetriamine/Fatty Acid Amide)	8	II	1760

<b>SECTION 14: REGULATORY INFORMATION</b>
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**SECTION 313 SUPPLIER NOTIFICATION:**

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS NUMBER	CHEMICAL NAME	% BY WEIGHT
None Listed		

**TSCA NOTIFICATION:**

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).

<b>SECTION 15: OTHER INFORMATION</b>
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To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Vishay Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.