



MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Epoxylite 813 Part A

November 22, 2005

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

MSDS # MGM076A

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	%
14808-60-7	Crystalline Silica	<16
14807-96-6	Talc	<9
25068-38-6	Epoxy Resin	<9
28064-14-4	Epoxy Resin	<80
106-89-8	Epichlorohydrin	Trace

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

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

Health Hazards (Acute and Chronic): May cause allergic skin reaction in susceptible individuals. May cause sensitization with repeated or prolonged contact.

Carcinogenicity: NTP: See Note
IARC Monographs: See Note
OSHA Regulated: See Note

NOTE: This product contains Crystalline Silica and Talc, particulates that are considered hazardous by OSHA (Table Z-3). Crystalline Silica is also listed as a carcinogen by IARC and NTP. Under normal conditions of use, this product as supplied does not pose a health risk from particulate matter. Physical degradation of the cured product (i.e., sanding, abrading, etc.) may pose a dust hazard. Repeated inhalation of such dust may cause lung injury.

NOTE: This product contains a chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

Signs and Symptoms of Exposure:

INHALATION: Vapors at high temperatures may cause irritation.

EYE CONTACT: May cause mild eye irritation. Direct contact with the product or exposure to vapors or mist may cause stinging, tearing and redness.

SKIN CONTACT: May cause allergic skin reaction.

INGESTION: Effects of ingestion are unknown.

Conditions Generally Aggravated by Exposure: Overexposure may aggravate existing eye, skin and/or respiratory disorders.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove to well ventilated area. If difficulty noted in breathing, get medical attention at once.

EYE CONTACT: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

SKIN CONTACT: In case of contact, immediately flush skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash and thoroughly clean contaminated clothing and shoes before reuse. Consult a physician.

INGESTION: If swallowed, consult a physician. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

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

Flammable limits: LEL: Not known UEL: Not known

Extinguishing Media: Carbon dioxide, dry chemical, foam, and vaporizing liquid type extinguishing agents have all been found suitable for use on flammable liquid fires of moderate size. Water spray (fog) is particularly effective on fires in flammable liquids and volatile solids having flash points above 100°F (38°C) but with liquids having flash points above 212°F (100°C), frothing may occur.

Special Firefighting Procedures: Firefighters should wear self-contained breathing apparatus to avoid inhalation of smoke or vapors. Water or foam may cause frothing when streams are directed into hot burning liquid.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Remove all ignition sources. Provide adequate ventilation. Avoid breathing vapors. Shut off source of spill if it can be done safely. Use non-sparking tools. Absorb with inert absorbent material and dispose of in accordance with applicable regulations.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Respiratory protection may be required if material is used in poorly ventilated areas or if material is sprayed or heated.

Ventilation: Use with adequate ventilation. Provide general dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below the applicable exposure limit (OSHA PEL). All application areas should be ventilated in accordance with applicable OSHA regulations.

Protective Gloves: Impervious gloves required.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other Protective Clothing or Equipment: Specific personal protective equipment will depend on the product user's operation.

Work / Hygienic Practices: Wash thoroughly after handling. Eyewash and safety shower should be available.

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Do not store above 120°F (48.9°C). Keep closure tight and container upright to prevent leakage. Store container out of sunlight and away from heat, sparks and flame. Store in a well ventilated area. Do not get in eyes. Avoid skin contact. Prevent repeated or prolonged breathing of vapor or spray mist. Avoid contact with or breathing of vapors during curing process.

Other Precautions: Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks and flames. Do not cut, puncture or weld on or near this container. Follow label warnings, until container is thoroughly cleaned or destroyed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Boiling Point:	Not known
Vapor Pressure (mmHg):	Not known
Vapor Density (Air = 1):	Not known
Specific Gravity (H₂O = 1):	1.41
Melting Point:	Not known
Evaporation Rate (BuAc = 1):	Not known
Volatile Organic Compounds:	0%
Solubility in Water:	Insoluble

Appearance and Odor: Gray liquid; slight odor.

SECTION 10: STABILITY AND REACTIVITY DATA
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Stability: Stable.

Conditions to Avoid: Excess heating over long periods of time degrades the resin.

Incompatibility (Materials to Avoid): Strong oxidizing agents, bases, acids and amines.

Hazardous Decomposition or By-products: The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION
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Crystalline Silica

OSHA PEL:	Not determined
ACGIH TLV:	0.05 mg/m ³
OTHER:	None listed

Talc

OSHA PEL:	Not determined
ACGIH TLV:	2.0 mg/m ³
OTHER:	None listed

Epoxy Resin

OSHA PEL:	Not determined
ACGIH TLV:	Not determined
OTHER:	Not determined

Epoxy Resin

OSHA PEL:	Not determined
ACGIH TLV:	Not determined
OTHER:	Not determined

Epichlorohydrin

OSHA PEL:	Not determined
ACGIH TLV:	Not determined
OTHER:	Not determined

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

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	UN NUMBER
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Not regulated		
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SECTION 14: REGULATORY INFORMATION

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
106-89-8	Epichlorohydrin	Trace

TSCA NOTIFICATION:

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

SECTION 15: OTHER INFORMATION

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.