



MATERIAL SAFETY DATA SHEET



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: M-Bond Curing Agent - Type 15

April 13, 2010

Vishay Measurements Group, Inc.
Post Office Box 27777
Raleigh, NC 27611

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	%
104-78-9	3-Diethylaminopropylamine	100

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: YES **Skin:** YES **Ingestion:** Accidental

Health Hazards (Acute and Chronic): Chronic over-exposure may cause blood effects. Exposure to high concentrations may cause central nervous system depression.

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

Signs and Symptoms of Exposure:

INHALATION: Harmful if inhaled. Causes chemical burn to the respiratory tract. Inhalation of high concentrations may cause pulmonary edema.

EYE CONTACT: May cause severe irritation, and possible eye burns.

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SKIN CONTACT: Harmful if absorbed through the skin. Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

INGESTION: Harmful if swallowed. Causes gastrointestinal burns.

Conditions Generally Aggravated by Exposure: Material may act as a sensitizer in susceptible individuals.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Get medical aid immediately. Remove from exposure and move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

EYE CONTACT: Immediately flush eyes with water for 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

SKIN CONTACT: Immediately flush skin with soap and water for at least 15 minutes while removing contaminated shoes and clothing. Wash contaminated clothing before reuse. Get medical aid immediately.

INGESTION: Get medical aid immediately. Do NOT induce vomiting. Call a poison control center.

NOTE TO PHYSICIAN: Treat symptomatically and supportively.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 127°F (53°C)

Flammable limits: LEL: 1 UEL: 7.5

Extinguishing Media: Water spray, dry chemical, carbon dioxide, chemical foam.

Special Firefighting Procedures: Wear self-contained breathing apparatus in pressure demand mode and protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Will burn if involved in a fire. Vapors may form an explosive mixture with air. Vapors can travel to source of ignition and flash back. Containers may explode in the heat of a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Evacuate area. Remove all sources of ignition. Wear self-contained breathing apparatus and personal protective equipment. Absorb with sand or vermiculite and place in closed containers for disposal. Use spark proof tools. Do not let this chemical enter the environment.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: A respiratory protection program that meets OSHA's 29CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Ventilation: Local exhaust ventilation may be necessary for some operations to prevent the heavier than air vapors from collecting and causing eye, skin, or mucous membrane irritation. If necessary, handle in chemical fume hood. Do not breathe vapor.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Eye Protection: Wear appropriate safety glasses or chemical safety goggles.

Other Protective Clothing or Equipment: Chemical resistant clothing is recommended. Should have access to safety shower and eyewash station in local area.

Work / Hygienic Practices: Wash thoroughly after handling and before eating, drinking or smoking.

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Do not breathe vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Readily absorbed through skin. Wash thoroughly after handling.

Other Precautions: Corrosive. Store in a tightly closed container. Keep away from sources of ignition. Store in a cool dry place.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	336.2- 339.8°F (168-171°C)
Vapor Pressure (mmHg):	2.2 mbar @ 68°F (20°C)
Vapor Density (Air = 1):	Not available
Specific Gravity (H₂O = 1):	0.82
Melting Point:	Not available
Evaporation Rate (BuAc = 1):	Not available
Volatile Organic Compounds:	0%
Solubility in Water:	Negligible

Appearance and Odor: Colorless to light yellow liquid, amine odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat.

Incompatibility (Materials to Avoid): Strong oxidizing agents, acids, acid chlorides, acid anhydrides, carbon dioxide, nitrites, nitric oxide.

Hazardous Decomposition or By-products: Thermal decomposition may produce nitrogen oxides, carbon monoxide, carbon dioxide and nitrosamines.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Diethylaminopropylamine

OSHA PEL: N/A
ACGIH TLV: N/A
OTHER: ORAL RAT LD₅₀ 550 mg/kg
SKIN RABBIT LD₅₀ 750 ul/kg
ORAL MOUSE LD₅₀ 425 mg/kg

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: This combustible material may be burned in a chemical incinerator equipped with an after burner and scrubber. Observe all local, state, and federal laws.

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Diethylaminopropylamine (Flammable Liquid & Corrosive)	3/8	II	2684

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
NONE		

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

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Data Sheet is from manufacturers of the original components. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.