



# MATERIAL SAFETY DATA SHEET

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** M-Coat B

November 29, 2005

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

**MSDS #** MGM021K

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	%
78-93-3	Methyl Ethyl Ketone	82.0
108-95-2	Phenol	<1.0

NOTE: The remaining 17% of this product is: Acrylo-nitrile rubber, a phenol formaldehyde resin and a chlorinated rubber.

## SECTION 3: HEALTH HAZARD DATA

### Routes of Entry:

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

**Health Hazards (Acute and Chronic):** Chronic effects may include kidney and liver damage and dermatitis.

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

**Signs and Symptoms of Exposure:**

**INHALATION:** May cause nose and throat irritation, headache, nausea, loss of coordination, dizziness, unconsciousness, and even asphyxiation.

**EYE CONTACT:** May cause irritation or corneal clouding.

**SKIN CONTACT:** May cause defatting or dermatitis.

**INGESTION:** Aspiration into lungs may cause chemical pneumonitis.

**NOTICE:** Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**Conditions Generally Aggravated by Exposure:** None known.

<b>SECTION 4: EMERGENCY AND FIRST AID PROCEDURES</b>
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**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician at once.

**EYE CONTACT:** Flush with plenty of water for at least 15 minutes while holding eyelids open. Flush longer if there is indication of residual material in the eye.

**SKIN CONTACT:** Remove contaminated clothing and launder before re-use. Wash affected area with plenty of soap and water.

**INGESTION:** Call a physician immediately. Induce vomiting **ONLY AT THE INSTRUCTIONS OF A PHYSICIAN.** Never give anything by mouth to an unconscious person.

<b>SECTION 5: FIRE AND EXPLOSION HAZARD DATA</b>
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**Flash Point (Method Used):** 20°F (-6°C) TCC

**Flammable limits:** LEL: 2.0 UEL: 10.0

**Extinguishing Media:** Water fog, carbon dioxide, foam, or dry chemical.

**Special Firefighting Procedures:** Do not enter confined fire space without proper protective equipment including NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** Vapors may build up in poorly ventilated areas and be ignited, causing flash fires or explosions. Vapors are heavier than air and may travel along ground or floor to source of ignition, causing flash fires or explosions.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Steps to be taken if material is released or spilled:** Eliminate all ignition sources. Provide adequate ventilation. Avoid breathing vapors. Avoid eye and skin contact. Wipe up with rags, paper, or other absorbent. Place in suitable closed container for disposal.

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

**Respiratory Protection:** For air contaminants above TLV or permissible limits, use NIOSH approved respirator for organic vapors.

**Ventilation:** Use local exhaust to keep vapors below TLV or permissible limits.

**Protective Gloves:** Impervious gloves are recommended.

**Eye Protection:** Chemical goggles are recommended.

**Other Protective Clothing or Equipment:** Safety shower and emergency eyewash station should be available in work area.

**Work / Hygienic Practices:** Wash thoroughly after use.

**SECTION 8: HANDLING AND STORAGE**

**Precautions to be taken in handling and storing:** Use only in a well ventilated area. Eliminate all sources of ignition such as sparks, flames, and non-explosion proof devices. Avoid prolonged or repeated skin contact or breathing of vapors. For industrial use only. Keep out of the reach of children. Store in tightly closed containers, in a cool dry place, away from all sources of ignition and heat. Large containers should be grounded and interconnected to prevent static build up during transfer operations. Empty containers of this material may be hazardous since they may contain residual liquid, vapors, or dust.

**Other Precautions:** In addition to any listed precautions, you should consult your occupational safety and health specialist to insure that the handling procedures will be adequate and in compliance with applicable laws and regulations.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	175°F (79°C)
<b>Vapor Pressure (mmHg):</b>	Not known
<b>Vapor Density (Air = 1):</b>	>1
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	0.84
<b>Melting Point:</b>	Not known
<b>Evaporation Rate (BuAc = 1):</b>	1
<b>Volatile Organic Compounds:</b>	675 g/liter
<b>Solubility in Water:</b>	Appreciable; more than 10%

**Appearance and Odor:** Tan, slightly viscous liquid with ketone odor.

### SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** Stable.

**Conditions to Avoid:** Heat, sources of ignition, flames.

**Incompatibility (Materials to Avoid):** Strong oxidizing agents.

**Hazardous Decomposition or By-products:** Carbon dioxide, carbon monoxide, smoke, aliphatics, and others.

**Hazardous Polymerization:** Will not occur.

### SECTION 11: TOXICOLOGICAL INFORMATION

Methyl Ethyl Ketone

OSHA PEL:	200 ppm
ACGIH TLV:	200 ppm
OTHER:	300 ppm STEL
	ORAL-RAT LD <sub>50</sub> 2737 mg/kg
	SKIN-RABBIT LD <sub>50</sub> 6480 mg/kg
	INHALATION-RAT LC <sub>50</sub> 23500 mg/m <sup>3</sup> (8H)

NOTE: Embryo/fetotoxic effects have been observed in laboratory rats exposed to over 1000 ppm Methyl Ethyl Ketone for most of gestation periods.

Phenol

OSHA PEL:	Not known
ACGIH TLV:	5 ppm
OTHER:	N/A

### SECTION 12: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose of in accordance with federal, state, and local regulations.

### SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Ethyl Methyl Ketone (Methyl Ethyl Ketone) Flammable Liquid	3	II	1193

**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.

<b>CAS NUMBER</b>	<b>CHEMICAL NAME</b>	<b>% BY WEIGHT</b>
78-93-3	Methyl Ethyl Ketone	82.0
108-95-4	Phenol	<1.0

**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.