



# MATERIAL SAFETY DATA SHEET



## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** M-Coat A

May 7, 2013

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	%
1330-20-7	Xylene	53.5-58.0
100-41-4	Ethyl Benzene	5.3-9.0
(Proprietary)	Oil Modified Polyurethane	33.8-41.3

## SECTION 3: HEALTH HAZARD DATA

### Routes of Entry:

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

**Health Hazards (Acute and Chronic):** Chronic inhalation can cause headache, loss of appetite, nervousness and pale skin. Repeated or prolonged skin contact may cause a skin rash. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Repeated exposure can damage bone marrow causing low blood cell count. May damage liver and kidneys.

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

**Signs and Symptoms of Exposure:**

**INHALATION:** Inhalation of vapors may be irritating to the nose and throat. Inhalation of high concentrations may result in nausea, vomiting, headache, ringing in the ears and severe breathing difficulties which may be delayed in onset. High vapor concentrations are anesthetic and central nervous system depressants.

**EYE CONTACT:** Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

**SKIN CONTACT:** Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

**INGESTION:** Ingestion causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce a severe hemorrhagic pneumonitis with pulmonary injury or death.

**Conditions Generally Aggravated by Exposure:** Persons with pre-existing skin disorders or eye problems or impaired kidney, liver, blood or respiratory function may be more susceptible to the effects of the substance.

<b>SECTION 4: EMERGENCY AND FIRST AID PROCEDURES</b>
--

**INHALATION:** If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

**EYE CONTACT:** In case of eye contact, immediately flush with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention immediately.

**SKIN CONTACT:** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Launder clothing before reuse. Thoroughly clean shoes before reuse. If persistent irritation occurs, get medical attention.

**INGESTION:** DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Never give anything by mouth to an unconscious person. Get medical attention.

<b>SECTION 5: FIRE AND EXPLOSION HAZARD DATA</b>
--

**Flash Point (Method Used):** 80°F (26°C) Tag Closed Cup

**Flammable limits:** LEL: 1.0 UEL: 7.0

**Extinguishing Media:** Use dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to non-flammable mixtures, protect personnel attempting to stop leak and disperse vapors.

**Special Firefighting Procedures:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Use water to keep fire exposed containers cool.

**Unusual Fire and Explosion Hazards:** Vapors may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled:** Wear self-contained breathing apparatus and full protective clothing. Shut off ignition sources; no flares, smoking or flames in area. Stop leak if you can do so without risk. Use water spray to reduce vapors. Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush area with water.

## SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

**Respiratory Protection:** Respiratory protection required if airborne concentration exceeds TLV. At concentrations up to 1000 ppm, a chemical cartridge respirator with organic vapor cartridge is recommended. Above this level, a self-contained breathing apparatus is recommended.

### Ventilation:

**Local Exhaust:** A system of local and/or general exhaust is recommended to keep employee exposures below the airborne exposure limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

**Mechanical:** Keep below TLV

**Special:** N/A

**Other:** N/A

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

**Eye Protection:** Use chemical safety goggles and a full faceshield where splashing is possible.

**Other Protective Clothing or Equipment:** Impervious apron is recommended.

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

## SECTION 8: HANDLING AND STORAGE

**Precautions to be taken in handling and storing:** Keep away from heat, sparks, open flame. Store in a cool, dry, well-ventilated area. Keep containers closed when not in use.

**Other Precautions:** Bond and ground containers when pouring to prevent static spark. Containers may be hazardous when empty since they retain product residue (vapors, liquids).

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	278°F (137°C)
<b>Vapor Pressure (mmHg):</b>	Not known
<b>Vapor Density (Air = 1):</b>	3.6
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	0.96
<b>Melting Point:</b>	Not known
<b>Evaporation Rate (BuAc = 1):</b>	0.6
<b>Volatile Organic Compounds:</b>	589 g/liter
<b>Solubility in Water:</b>	Negligible

**Appearance and Odor:** Amber liquid; solvent odor.

**SECTION 10: STABILITY AND REACTIVITY DATA**

**Stability:** Stable under ordinary conditions of use and storage.

**Conditions to Avoid:** Heat, flame, other sources of ignition.

**Incompatibility (Materials to Avoid):** Avoid contact with strong oxidizing agents.

**Hazardous Decomposition or By-products:** Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

**Hazardous Polymerization:** Will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

Xylenes

OSHA PEL:	100 ppm
ACGIH TLV:	100 ppm
OTHER:	STEL 150 ppm
	ORAL RAT LD <sub>50</sub> : 4300 mg/kg
	INHALATION RAT LC <sub>50</sub> : 5000 ppm/4H
	SKIN RABBIT LD <sub>50</sub> : >1700 mg/kg
	IRRITATION EYE RABBIT: 87 mg mild (Std. Draize)
	IRRITATION SKIN RABBIT: 500 mg/24 moderate (Std. Draize)
	NOTE: Investigated as a tumorigen, mutagen, reproductive effector. May cause teratogenic effects.

M-Coat A MSDS (Continued)

Ethyl Benzene

OSHA PEL: 100 ppm  
ACGIH TLV: 100 ppm  
OTHER: STEL 125 ppm  
ORAL RAT LD<sub>50</sub>: 3500 mg/kg  
SKIN RABBIT LD<sub>50</sub>: 17800 uL/kg  
NOTE: Investigated as a tumorigen, mutagen, reproductive effector. May cause teratogenic effects.

Oil Modified Polyurethane

OSHA PEL: Not known  
ACGIH TLV: Not known  
OTHER: Not known

**SECTION 12: DISPOSAL CONSIDERATIONS**

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

**SECTION 13: TRANSPORTATION INFORMATION**

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Xylenes Flammable Liquid	3	II	1307

**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
1330-20-7	Xylenes	53.5-58.0
100-41-4	Ethyl Benzene	5.3-9.0

**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. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.