

SAFETY DATA SHEET

Version: 4.0
Date of Issue: 20-Apr-2017
Date of First Issue: 09-Dec-2011

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ACCORDING TO OSHA HCS (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

Product identifier used on the label	M-Coat A
Other means of identification	
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
Recommended use of the chemical and restrictions on use	
Recommended use	Coatings and paints, thinners, paint removers.
Restrictions on use	None known.
Details of the supplier of the safety data sheet	
Supplier	VISHAY MEASUREMENTS GROUP, INC.
Address of Supplier	Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	+1 919-365-3800
Fax	+1 919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com
Emergency telephone number	1-800-424-9300 CHEMTREC (24 hours)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200

Physical hazards	Flammable Liquid, Category 3
Health hazards	Aspiration hazard, Category 1 Acute toxicity, Category 4 (Dermal) Acute toxicity, Category 4 (Inhalation) Skin corrosion/irritation, Category 2 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 2
Environmental hazards	Not Classified

Hazard Symbol



Signal Word(s)

Danger

Hazard Statement(s)

Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Harmful in contact with skin.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
(Affected organs: central nervous system, liver, kidney, hearing organs)

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Precautionary Statement(s)

Do not breathe vapour.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Wash hands and exposed skin after use.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice/attention if you feel unwell.
Store locked up
Dispose of contents in accordance with local, state or national legislation.

Other hazards

None.

Percent of the mixture consists of ingredient(s) of unknown acute toxicity:

41.3% (Oil Modified Polyurethane)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures Substances in preparations / mixtures

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard classification
Xylene	50 - 60	1330-20-7	215-535-7	Flammable Liquid, Category 3 Aspiration hazard, Category 1 Acute toxicity, Category 4 (Dermal) Acute toxicity, Category 4 (Inhaled) Skin corrosion/irritation, Category 2 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 Specific target organ toxicity — repeated exposure, Category 2
Oil Modified Polyurethane	30 - 45	-	-	Not classified
Ethylbenzene	< 10	100-41-4	202-849-4	Flammable Liquid, Category 2 Aspiration hazard, Category 1 Acute toxicity, Category 4 (Inhaled) Specific target organ toxicity — repeated exposure, Category 2 Hazardous to the aquatic environment, Chronic, Category 3

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Self-protection of the first aider

Do not breathe vapour. Wear suitable protective clothing. Wear suitable respiratory protective equipment if exposure to high levels of material are likely. Do not use mouth-to-mouth resuscitation.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

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Skin Contact	waistband. Apply artificial respiration if necessary. Call a POISON CENTER/doctor. IF ON SKIN (or hair): Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation occurs, get medical advice/attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Rinse mouth. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Immediately call a POISON CENTER/doctor.
Most important symptoms and effects, both acute and delayed	May be fatal if swallowed and enters airways. Harmful in contact with skin or if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically. IF SWALLOWED: Do NOT induce vomiting.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media Suitable Extinguishing Media Unsuitable extinguishing Media	Extinguish preferably with foam, carbon dioxide or dry chemical. Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to the fire and to disperse fumes.
Special hazards arising from the substance or mixture	Flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon oxides and traces of incompletely burned carbon compounds. May form explosive mixture with air particularly in enclosed spaces. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback.
Special protective equipment and precautions for fire fighters	Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Ensure suitable personal protection during removal of spillages. See Section: 8.
Methods and material for containment and cleaning up	Ensure suitable personal protection (including respiratory protection) during removal of spillages. Contain spillages. Use non-sparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Ensure adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.
Conditions for safe storage, including any incompatibilities	Keep only in original container. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and

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Storage temperature
Incompatible materials

other ignition sources. No smoking.
Ambient.
Keep away from: Strong oxidising agents and polymerisation catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidising agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Xylene	1330-20-7	100	435	150*	655*	NIOSH
		100	435	-	-	OSHA
		100	-	150	-	ACGIH, A4
Ethylbenzene	100-41-4	100	435	125*	545*	NIOSH
		100	435	-	-	OSHA
		20	-	-	-	ACGIH, A3

Note: OSHA PELs 1910.1000 TABLE Z-1 / NIOSH RELs / ACGIH TLVs

*NIOSH 15 minute average values

A4: Not Classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of the lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histological type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiological studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

The other components listed in Section 3 do not have occupational exposure limits.

Biological Exposure Indices

SUBSTANCE	CAS No.	Determinant	Biological Exposure Indices	Sampling Time	Note
Xylene	1330-20-7	Methylhippuric acids in urine.	15 g/g Creatinine	End of shift	-
Ethylbenzene	100-41-4	Sum of mandelic acid and phenylglyoxylic acid in urine	0.15 g/g Creatinine	End of shift	Ns

Source: 2015 ACGIH Biological Exposure Indices (BEIs)

Ns - Nonspecific

The other components listed in Section 3 do not have biological exposure indices.

Appropriate engineering controls

Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Eyewash bottles should be available.

Individual protection measures, such as personal protective equipment (PPE)

General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place.

Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection.

Skin protection

Hand protection: Wear impervious gloves. Gloves should be changed regularly

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Respiratory protection



to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Amber liquid
Odor	Benzene-like aromatic odour
Odor Threshold	Not established.
pH	Not available.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	137°C
Flash Point	26°C [Closed cup]
Evaporation rate (Butyl acetate = 1)	0.6 (BuAc = 1)
Flammability (solid, gas)	Liquid - Not applicable
Upper/lower flammability or explosive limits	Flammable Limits (Lower) (%v/v): 1.0 (Air) Flammable Limits (Upper) (%v/v): 7.0 (Air)
Vapour pressure	>1.1 bar
Vapour density	3.6 (Air = 1)
Relative density	1.14 g/cm ³
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.

Other information

Volatile Organic Compound Content: 589 g/l

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground. May form explosive mixture with air particularly in enclosed spaces. Susceptible to violent exothermic polymerisation, initiated by heating or the presence of catalysts.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials	Keep away from: Strong oxidising agents and polymerisation catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidising agents.
Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon oxides and traces of incompletely burned carbon compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity - Ingestion

Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.

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Acute toxicity - Inhalation	Acute toxicity, Category 4: Harmful if inhaled. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 19.0 mg/l.
Acute toxicity - Skin Contact	Acute toxicity, Category 4: Harmful in contact with skin. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 1896.6 mg/kg bw/day.
Skin corrosion/irritation	Skin corrosion/irritation, Category 2: Causes skin irritation.
Serious eye damage/irritation	Eye Irritation, Category 2: Causes serious eye irritation.
Respiratory or skin sensitization	Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Specific target organ toxicity — single exposure, Category 3: May cause respiratory irritation.
STOT - repeated exposure	Specific target organ toxicity — repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure. (Affected organs: central nervous system, liver, kidney, hearing organs)
Aspiration hazard	Aspiration hazard, Category 1: May be fatal if swallowed and enters airways.
Information on likely routes of exposure	
Inhalation	Possible – accidental exposure
Ingestion	Unlikely – accidental exposure
Skin Contact	Possible – accidental exposure
Eye Contact	Unlikely – accidental exposure
Early onset symptoms related to exposure	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Delayed health effects from exposure	May cause damage to organs through prolonged or repeated exposure. (Affected organs: central nervous system, liver, kidney, hearing organs). May be fatal if swallowed and enters airways.
Other information	
NTP Report on Carcinogens	Not listed
IARC Monographs	Xylene: Group 3 - Not classifiable as to its carcinogenicity to humans. Ethylbenzene: Group 2B – Possibly carcinogenic to humans.
OSHA Designated Carcinogen	Not listed

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 > 100 mg/l (Fish)
Persistence and degradability	Part of the components are biodegradable.
Bioaccumulative potential	No data.
Mobility in soil	The product is predicted to have low mobility in soil (Insoluble in water).
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Do not release undiluted and unneutralised to the sewer. Dispose of contents in accordance with local, state or national legislation. This material and its container must be disposed of as hazardous waste.
Additional Information	Containers of this material may be hazardous when empty since they retain product residue.

SECTION 14: TRANSPORT INFORMATION

UN number	ADR/RID	IMDG	IATA
	UN 1263	UN 1263	UN 1263

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UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Not classified as a Marine Pollutant.	Not classified as a Marine Pollutant.	Not classified as a Marine Pollutant.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.		
Special precautions for user	See Section: 2		

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal Regulations

TSCA (Toxic Substance Control Act)	Xylene - Subject to 25,000 lb reporting threshold Ethylbenzene - Subject to 25,000 lb reporting threshold Not Listed
EPCRA/SARA Section 302 Extremely Hazardous Substances	
EPCRA Section 313 Toxics Release Inventory (TRI) Program	Xylene - De Minimis limit: 1% Ethylbenzene - De Minimis limit: 1%
NIOSH Occupational Carcinogen List	Not Listed
OSHA List of highly hazardous chemicals, toxics and reactives	Not Listed
NTP Report on Carcinogens (RoC) List	Not Listed
Poison Prevention Packaging Act	Xylene - Substance requiring special packaging - Solvents for paint or other similar surface-coating materia

US State Regulations

California State, Proposition 65 List	Ethylbenzene - Safe harbor level - NSRL: 54 (inhalation) ug/day, 41 (oral) ug/day
California State, Safer Consumer Products Regulations	Xylene - Initial Candidate Chemicals List Ethylbenzene - Initial Candidate Chemicals List
Maine State, Toxic Chemicals in Children's Products Act	Ethylbenzene - COC List
New Jersey State Worker and Community RTK Act	Xylene - RTKHSL. SHHSL Ethylbenzene - RTKHSL. SHHSL
Pennsylvania State, Worker and Community RTK Act	Xylene - Hazardous Substance List Ethylbenzene - Hazardous Substance List. Environmental Hazard List
Rhode Island State, Hazardous Substances RTK Act	Xylene - Hazardous Substance List Ethylbenzene - Hazardous Substance List

Non-Regional

IARC Monographs, List of Classifications	Xylene - Group 3 Ethylbenzene - Group 2B
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SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated mixture classification. New SDS Regulation compliant with HazCom 2012 format, all sections have been updated to include new information. Please review SDS with care.

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References:

Existing Safety Data Sheet (SDS)
EU Data: Existing ECHA registration(s) for Xylene (CAS# 1330-20-7) and Ethylbenzene (CAS# 100-41-4). and Harmonised Classification(s) for Xylene (CAS# 1330-20-7) and Ethylbenzene (CAS# 100-41-4).

GHS Classification of the substance or mixture	Classification Procedure
Flammable Liquid, Category 3	Flash Point [Closed cup] Test Result/ Boiling Point (°C)
Aspiration hazard, Category 1	Estimated Viscosity

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Acute toxicity, Category 4 (Dermal)	Acute Toxicity Estimate Mixture Calculation
Skin corrosion/irritation, Category 2	Threshold Calculation
Eye Irritation, Category 2	Threshold Calculation
Acute toxicity, Category 4 (Inhalation)	Acute Toxicity Estimate Mixture Calculation
Specific target organ toxicity — single exposure, Category 3	Threshold Calculation
Specific target organ toxicity — repeated exposure, Category 2	Threshold Calculation

LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Indices (ACGIH)

IARC: International Agency for Research on Cancer

Irr: Irritation

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: The Occupational Safety & Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PEL: Permissible exposure limit

REL: Recommended exposure limit

SCL: Specific Concentration Limit

Skin²: Risk of overexposure via dermal contact

STEL: Short Term Exposure Limit

TLV: Threshold Limit value

TSCA: Toxic Substance Control Act

TWA: Time Weighted Average

URT: Upper respiratory tract

vPvB: very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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