

SAFETY DATA SHEET

Revision: 3.1 Date: 17 August 2016


ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),
1272/2008 (CLP) & 2015/830

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	M-Coat A
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified Use(s)	Coatings and paints, thinners, paint removers.
Uses Advised Against	None known.
1.3 Details of the supplier of the safety data sheet	
Company Identification	VISHAY MEASUREMENTS GROUP UK LTD Stroudley Road Basingstoke Hampshire United Kingdom RG24 8FW
Telephone	+44 (0) 1256 462131
Fax	+44 (0) 1256 471441
E-Mail (competent person)	mm.uk@vishaypg.com
1.4 Emergency telephone number	
Emergency Phone No.	(00-1) 703-527-3887
Languages spoken	CHEMTREC (24 hours) All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Regulation (EC) No. 1272/2008 (CLP)	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373
2.2 Label elements	
Product Name	According to Regulation (EC) No. 1272/2008 (CLP) M-Coat A
Hazard Pictogram(s)	
Signal Word(s)	Danger
Contains:	Xylene and Ethylbenzene
Hazard Statement(s)	H226: Flammable liquid and vapour. H304: May be fatal if swallowed and enters airways. H312: Harmful in contact with skin. H315: Causes skin irritation. H319: Causes serious eye irritation. H332: Harmful if inhaled. H335: May cause respiratory irritation. H373: May cause damage to organs through prolonged or repeated exposure.

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Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe vapour.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331: Do NOT induce vomiting.

2.3 Other hazards

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable.

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Xylene	50 - 60	1330-20-7	215-535-7	Not yet assigned in the supply chain	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373
Oil Modified Polyurethane	30 - 45	-	-	Not yet assigned in the supply chain	Not classified
Ethylbenzene	< 10	100-41-4	202-849-4	Not yet assigned in the supply chain	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Acute Tox. 4; H332 STOT RE 2; H373 Aquatic Chronic 3; H412

For full text of H phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Do not breathe vapour. Avoid all contact.

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 waistband. Apply artificial respiration if necessary. Call a POISON CENTER/doctor.

Skin Contact

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.

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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.

4.2 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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Notes to a physician:

IF SWALLOWED: Consider use of charcoal as a slurry (240mL water/30 g charcoal). Usual dose: 25 to 100 g in adults. If determined necessary (and under qualified medical supervision), the stomach should be emptied by gastric lavage with the airway protected by endotracheal intubation.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media
Unsuitable extinguishing media

Extinguish preferably with foam, carbon dioxide or dry chemical.
Do not use water jet. Direct water jet may spread the fire.

5.2 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.

5.3 Advice 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

6.1 Personal precautions, protective equipment and emergency procedures

Stop leak if safe to do so. Avoid all contact. Do not ingest. If swallowed then seek immediate medical assistance. Use personal protective equipment as required. Do not breathe vapour. Ensure adequate ventilation. Remove all ignition sources. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Remove clothing and wash thoroughly before use. Isolate the area and allow vapours to disperse. In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air. Evacuate the area and keep personnel upwind.

Large spillages:
6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

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.

Large spillages:

Evacuate the area and keep personnel upwind. Notify police and fire brigade as soon as possible.

6.4 Reference to other sections

See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1 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 all contact. 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.

7.2 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
Storage life
Incompatible materials

other ignition sources. No smoking.
Ambient.
Stable under normal conditions.
Keep away from: Strong oxidising agents and polymerisation catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidising agents.
See Section: 1.2.

7.3 Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 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, o-,m-,p- or Mixed isomers	1330-20-7	50	221	100	442	EU IOELV
		-	200	-	400	WEL
Ethylbenzene	100-41-4	100	441	125	552	WEL, Sk

Note: WEL: Workplace Exposure Limit (UK HSE EH40).

IOELV: Indicative Occupational Exposure Limit Value

Sk - Can be absorbed through skin.

8.1.2 Biological limit value

SUBSTANCE	CAS No.	Biological monitoring guidance value	Sampling Time
Xylene, o-,m-,p- or mixed isomers	1330-20-7	650 mmol methyl hippuric acid/ mol Creatinine	Post shift

Note: Bmgv: Biological monitoring guidance value (UK HSE EH40)

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 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.

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

General hygiene measures for the handling of chemicals are applicable. Avoid all contact. 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 (EN166).

Skin protection



Hand protection:

Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Suitable materials:

Fluorinated rubber - FKM (Minimum thickness: 0.4 mm; breakthrough time: ≥ 8hour)

Unsuitable gloves materials:

Leather gloves. Natural rubber/. Polychloroprene - CR. Nitrile rubber. Butyl rubber. PVC

Body protection:

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

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Respiratory protection



In case of inadequate ventilation wear respiratory protection. Open system(s):
Wear suitable respiratory protective equipment. A suitable mask with filter type A
(EN141 or EN405) may be appropriate.

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Amber liquid
Odour	Benzene-like aromatic odour
Odour 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	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.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

Volatile Organic Compound Content: 589 g/l

SECTION 10: STABILITY AND REACTIVITY

10.1 Stability and reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 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.
10.4 Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
10.5 Incompatible materials	Keep away from: Strong oxidising agents and polymerisation catalysts, such as peroxy or azo compounds, strong acids, alkalis and oxidising agents.
10.6 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

11.1 Information on toxicological effects	All test data taken from existing ECHA registrations for the substances mentioned.
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.
Acute toxicity - Inhalation	Acute Tox. 4: Harmful if inhaled.

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Xylene:	Acute Toxicity Estimate Mixture Calculation: Estimated LC50 15.7 mg/l.
Ethylbenzene:	LC50 (inhalation) mg/l/4h: 6700 ppm (EU Method B.2)
Acute toxicity - Skin Contact	LC50 (inhalation) mg/l/4h: 4000 ppm (Standard acute method)
	Acute Tox. 4: Harmful in contact with skin.
	Acute Toxicity Estimate Mixture Calculation: Estimated LC50 1833.3 mg/kg bw/day.
Xylene:	No data. Harmonised Classification
Skin corrosion/irritation	Skin Irrit. 2: Causes skin irritation.
Xylene:	Test Result: Irritating to skin. (Chatterjee A <i>et al</i> , 2005)
Serious eye damage/irritation	Eye Irrit. 2: Causes serious eye irritation.
Xylene:	Test Result: Irritating to eyes. (Hine CH <i>et al</i> , 1970)
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	STOT SE 3: May cause respiratory irritation.
Xylene:	Test Result: LOAEC 580 ppm (EU Method B.2)
STOT - repeated exposure	STOT RE 2: May cause damage to organs through prolonged or repeated exposure.
	Test Result: NOAEL 150 mg/kg bw/day (OECD 408)
Xylene:	Test Result: NOAEL 75 mg/kg bw/day (OECD 408)
Ethylbenzene:	Asp. Tox. 1: May be fatal if swallowed and enters airways.
Aspiration hazard	Kinematic Viscosity @ 40 °C 0.623 cST
Xylene:	Kinematic Viscosity @ 20 °C 0.74 cST
Ethylbenzene:	None.
11.2 Other information	

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 > 100 mg/l (Fish)
Ethylbenzene:	EC50 (Algae) 5.0 – 18.0 mg/l
12.2 Persistence and degradability	Part of the components are biodegradable.
12.3 Bioaccumulative potential	No data.
12.4 Mobility in soil	The product is predicted to have low mobility in soil (Insoluble in water).
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6 Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 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.
13.2 Additional Information	Containers of this material may be hazardous when empty since they retain product residue.

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA
14.1 UN number	UN 1263	UN 1263	UN 1263
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	II	II
14.5 Environmental hazards	Not classified	Not classified as a Marine Pollutant.	Not classified
14.6 Special precautions for user	See Section: 2		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.		
14.8 Additional Information	None.		

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SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.1.1 EU regulations**
Authorisations and/or Restrictions On Use Not restricted
CoRAP Substance Evaluation Xylene: Substance identified for evaluation in 2017
- 15.1.2 National regulations**
None
- 15.2 Chemical Safety Assessment**
A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

SECTION 1: Addition of Languages spoken

SECTION 2: Removal of Additional Information

SECTION 3: Change None assigned to Not yet assigned in the supply chain. Removal of Hazard Statement(s) and Addition of For full text of H phrases see section 16.

SECTION 4: Addition of the following phrase(s); Use personal protective equipment as required. Ensure adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. and Avoid all contact. and Removal of Wear suitable protective clothing. Wear suitable respiratory protective equipment if exposure to high levels of material are likely. to Self-protection of the first aider.

Addition of Notes to a physician:

SECTION 5: Unsuitable extinguishing media Updated to Do not use water jet. Direct water jet may spread the fire.

SECTION 6: Updated Personal precautions, protective equipment and emergency procedures and Methods and material for containment and cleaning up. Addition of Large spillages:

SECTION 7: Updated Avoid contact with skin, eyes or clothing. to Avoid all contact.

SECTION 8: Updated Avoid contact with skin, eyes or clothing. to Avoid all contact. Addition of Suitable materials and Unsuitable gloves materials: to Skin protection. Addition of A suitable mask with filter type A (EN141 or EN405) may be appropriate. to Respiratory protection. Addition of Biological limit value

SECTION 11: Addition of test data for Xylene and Ethylbenzene

SECTION 12: Addition of test data for Ethylbenzene

SECTION 14: Formatting updated

SECTION 15: Updated Substance(s) of Very High Concern (SVHCs) to Authorisations and/or Restrictions On Use. Addition of CoRAP Substance Evaluation. Removal of Wassergefährdungskategorie (Germany). Updated Not available. to A REACH chemical safety assessment has not been carried out.

SECTION 16: Addition of Literature References and Hazard classification / Classification code:

References: Existing Safety Data Sheet (SDS). Harmonised Classification(s) for Xylene (CAS No. 1330-20-7) and Ethylbenzene (CAS No. 100-41-4). Existing ECHA registration(s) for Xylene (CAS No. 1330-20-7) and Ethylbenzene (CAS No. 100-41-4).

Literature References:

1. Chatterjee A, Babu R, Abaghotu E and Singh M, 2005, The effect of occlusive and unocclusive exposure to xylene and benzene on skin irritation and molecular responses in hairless rats, Arch Toxicol 79: 294-301.
2. Hine CH, Zuidema HH, 1970, The toxicological properties of hydrocarbon solvents, Industrial Medicine 39, 215-200.

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Flam. Liq. 3; H226	Flash Point [Closed cup] Test Result/ Boiling Point (°C)
Asp. Tox. 1; H304	Estimated Viscosity / Expert judgement
Acute Tox. 4; H312	Acute Toxicity Estimate Mixture Calculation
Skin Irrit. 2; H315	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
Acute Tox. 4; H332	Acute Toxicity Estimate Mixture Calculation
STOT SE 3; H335	Threshold Calculation
STOT RE 2; H373	Threshold Calculation

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LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Flam. Liq. 2; Flammable liquid Category 2
Flam. Liq. 3; Flammable liquid Category 3
Asp. Tox. 1; Aspiration Toxicity Category 1
Acute Tox. 4; Acute toxicity Category 4
Skin Irrit. 2; Skin Irritation Category 2
Eye Irrit. 2; Eye Irritation Category 2
Acute Tox. 4; Acute toxicity Category 4
STOT SE 3; Specific target organ toxicity — single exposure Category 3
STOT RE 2; Specific target organ toxicity — repeated exposure
Category 2
Aquatic Chronic 3; Aquatic and Terrestrial Ecotoxicity Chronic exposure
Category 3

Hazard Statement(s)

H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H373: May cause damage to organs through prolonged or repeated
exposure.
H412: Harmful to aquatic life with long lasting effects.

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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Annex to the extended Safety Data Sheet (eSDS)

No information available.

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