SAFETY DATA SHEET

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Date of issue: 12th November 2020
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In accordance with Schedule 1 of Hazardous products regulations (HPR) (WHMIS 2015)

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

Product identifier

Product Name	M-Coat FBT
Other Means of Identification	None

Recommended use and restrictions

Recommended use	Adhesives, sealants.
Restrictions on use	None known.

Initial Supplier Identifier

Company Identification	VISHAY MEASUREMENTS GROUP, INC.
Telephone	Post Office Box 27777 Raleigh, NC 27611 USA
E-Mail (competent person)	mm.us@vishaypg.com

Emergency telephone number

Emergency Phone No.	1-800-424-9300	CHEMTREC (24 hours)
Languages spoken	English	

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

In accordance with Schedule 1 of Hazardous Products Regulations (HPR) (WHMIS 2015)

Flammable Liquid - Category 3
Aspiration hazard - Category 1
Skin corrosion/irritation - Category 2
Eye Irritation - Category 2
Specific target organ toxicity — repeated exposure, Category 2

Label elements

Hazard Pictogram(s)

Signal Word(s)

DANGER

Hazard Statement(s)

Flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use non-sparking handtools.
Do not breathe vapour.
Keep container tightly closed.
Wear protective gloves/protective clothing/eye protection/face protection.
Take off contaminated clothing and wash it before reuse.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Store locked up.
Get medical advice/attention if you feel unwell.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents in accordance with local, state or national legislation.

Other hazards **None.**

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures

GHS Classification

Chemical Name	CAS No.	Concentration (%W/W)	Common name(s), synonym(s) of the substance	Hazard classification
Isobutylene / Isoprene / Butene / Mineral Filler Blend	-	80 - 100	-	Not classified
Xylene	1330-20-7	10 – 30	Dimethylbenzene	Flammable Liquid, Category 3 Aspiration hazard, Category 1 Acute toxicity (Dermal) - Category 4 Acute toxicity (Inhalation) - Category 4 Skin corrosion/irritation, Category 2 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 (Respiratory tract) Specific target organ toxicity — repeated exposure, Category 2 (Central nervous system, Liver, Kidneys) Hazardous to the aquatic environment, Chronic, Category 3

Prescribed Concentration Ranges used for trade secret purposes (Canada Gazette, Part II, Vol. 152, No. 8)

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 — Unlikely route of exposure. Mixture is a paste. IF exposed: Remove person to fresh air and keep comfortable for breathing.

Skin Contact — IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation or rash 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. Causes skin irritation. Causes serious eye 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	As appropriate for surrounding fire. Extinguish preferably with dry chemical, sand, foam or carbon dioxide.
Unsuitable extinguishing Media	Do not use water jet. Direct water jet may spread the fire.
Special hazards arising from the substance or mixture	Flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide, Phenolics, Acids and Aldehydes. 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. Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Do not breathe vapour.
Environmental precautions	Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.
Methods and material for containment and cleaning up	Ensure suitable personal protection during removal of spillages. Contain spillages. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do NOT absorb in saw-dust or other combustible absorbents. 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.
Reference to other sections	See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin, eyes or clothing. Do not breathe vapour. Ensure adequate ventilation. 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. Take precautionary measures against static discharge.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight.
Storage temperature	Ambient.
Incompatible materials	Keep away from: Acids and Strong oxidising agents (May cause fire).
Specific end use(s)	See Section: 1

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE	CAS No.	ACGIH® TLV® (ppm)		OSHA PEL (ppm)		Note
		TWA	STEL	TWA	STEL	
Xylene	1330-20-7	100	-	150	-	A4

Source: ACGIH: American Conference of Governmental Industrial Hygiene. TLV: Threshold Limit Value (ACGIH) PEL (OSHA)
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.

Alberta: Occupational Health And Safety Code, 2020; Quebec: Health and Safety Work Act, 2020

SUBSTANCE	CAS No.	8-hour Occupational Exposure Limits			15-minute or ceiling (c) Occupational Exposure Limits		Note
		ppm	mg/m³	f/cc	STEL (ppm)	STEL (mg/m³)	
Xylene	1330-20-7	100	434	-	150	651	Alberta
		100	434	-	150	651	OEL

Source: Alberta: Occupational Health And Safety Code, 2020
OEL: Quebec Work Health and Safety Regulations, Health and Safety Work Act, 2020 (Chapter S – 2.1, a. 223)

British Columbia: Occupational Health and Safety Guidelines, 2015; Northwest Territories: Occupational Health and Safety Regulations, 2015; Yukon Territory: Occupational Health and Safety Act, 1986

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Xylene	1330-20-7	100	-	150	-	WEL
		100	-	150	-	NW
		100	435	150	650	YK

Source: WEL: Occupational Health and Safety Guidelines Part 5: Chemical Agents and Biological Agents (British Columbia)
NW: WSCC, Occupational Health and Safety Regulations, Northwest Territories, R-039-2015
Yukon Territory (YK): Occupational Health and Safety Act. O.I.C. 1986/164 Occupational Health Regulations.

Ontario: Occupational Health and Safety Act, 1990; Saskatchewan: Occupational Health and Safety Regulations, 1996.

SUBSTANCE	CAS No.	Time Weighted Average (TWA)	STEL (ppm)	Note
Xylene	1330-20-7	100	150	WEL
		100	150	SK

Source: WEL: Occupational Health and Safety Act, R.R.O. 1990, Regulation 833, CONTROL OF EXPOSURE TO BIOLOGICAL OR CHEMICAL AGENTS (Ontario)
Saskatchewan (SK): Occupational Health and Safety Regulations, 1996, O-1.1 REG 1, 10 Aug 2007 SR 67/2007 s33.

Biological limit value

SUBSTANCE	CAS No.	Biological exposure determinant factors	Biological Exposure Indices	Sampling Time	Note
Xylene	1330-20-7	Methylhippuric acids: Urine	1.5 mg/g Creatinine	End of Shift	-

Source: 2015 ACGIH Biological Exposure Indicies (BEIs)

Exposure controls

Appropriate engineering controls

Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Local exhaust recommended. Guarantee that the eye flushing systems and safety showers are located close to the working place.

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. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

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 to avoid permeation problems. The gloves type used must be chosen based on the work activity and duration as well as concentration/quantity of material being handled. Recommended: Neoprene.

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

Respiratory protection

Use only in well-ventilated areas. 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	Black paste
Odour	Aromatic.
Odour threshold	Not applicable.
pH	Not established.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not established.
Flash point	Not applicable.
Evaporation rate (Water = 1)	0.7 (Xylene)
Flammability (solid, gas)	Not applicable - Liquid.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	3.7 (Xylene)
Relative density	~1.1 g/cm³ (Water = 1)
Solubility(ies)	Negligible (Water)
Partition coefficient: n-octanol/water	Not established.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

Other information — Volatile Organic Compound Content: 302 g/l

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerisation will not occur. Flammable liquid and vapour. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Avoid contact with oxidising substances. May cause fire.
Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
Incompatible materials	Keep away from: Acids and Strong oxidising agents.
Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide, Phenolics, Acids and Aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

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	Based upon the available data, the classification criteria are not met.

	Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20.0 mg/l.
Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >2000 mg/kg bw/day.
Skin corrosion/irritation	Skin corrosion/irritation, Category 2: Causes skin irritation.
Xylene	Skin corrosion/irritation, Category 2 Read across (chevron paraxylene). Slightly irritating to skin. (rat) (EU Method B.4) (Chatterjee, 2005).
Serious eye damage/irritation	Eye Irritation, Category 2: Causes serious eye irritation.
Xylene	Eye Irritation, Category 2 Harmonised Classification Read across. Slightly irritating to skin. (rabbit) (Unnamed, 1983)
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.
Xylene	IARC Classification: Group 3. Not classifiable as to its carcinogenicity to humans.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Specific target organ toxicity — repeated exposure, Category 2; May cause damage to organs through prolonged or repeated exposure.
Xylene	Specific target organ toxicity — repeated exposure, Category 2 Oral: NOAEL 750 mg/kg bw/day (rat) (EU Method B.32) (Unnamed, 1986) Inhalation: NOAEL >3515 mg/kg bw/day (Dog) (Carpenter, 1975) Dermal: No data
Aspiration hazard	Aspiration hazard, Category 1; May be fatal if swallowed and enters airways.
Xylene	Aspiration hazard, Category 1; May be fatal if swallowed and enters airways. Viscosity: 0.74 mm^2/s @ 20℃
Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 > 100 mg/l (Fish)
Persistence and degradability	No data for the mixture as a whole. Part of the components are poorly biodegradable.
Isobutylene/Isoprene/Butene/Mineral Filler Blend	No data
Xylene	Readily biodegradable. (14 days) (OECD 301F)
Bioaccumulative potential	No data for the mixture as a whole.
Isobutylene/Isoprene/Butene/Mineral Filler Blend	No data
Xylene	The substance has low potential for bioaccumulation. BCF: 25.9 (Walsh et al. 1977)
Mobility in soil	The product is predicted to have low mobility in soil. Solubility (Water): Negligible
Isobutylene/Isoprene/Butene/Mineral Filler Blend	No data
Xylene	The substance is predicted to have moderate mobility in soil. Log Koc= 2.73 (Hodson et al, 1988).
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods	Dispose of this material and its container as hazardous waste. Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation. Dispose of contents in accordance with local, state or national legislation. Containers of this material may be hazardous when empty since they retain product residue.

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	**IMDG**	**IATA/ICAO**
UN number	UN 1139	UN 1139	UN 1139

UN proper shipping name	COATING SOLUTION	COATING SOLUTION	COATING SOLUTION
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	Not classified as a Marine Pollutant / Environmentally hazardous substance		
Special precautions for user	See Section: 2		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.		
Additional Information			
Limited Quantities	5 L		
Excepted quantities	E1		
Tunnel restriction code	3 D/E		

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture	
National regulations	
CEPA, Domestic Substances List	Xylene: Yes
CEPA, Priority Substances List	Xylene: PSL 1
CEPA, List of Toxic Substances (Schedule 1)	Xylene: VOC - Item 65
CEPA, National Pollutant Release Inventory	Xylene (Mixed isomers: m-xylene, o-xylene, p-xylene): Threshold Category: Part 1A, Mass Threshold: 10 tonnes Concentration threshold: 1%; Threshold Category: Part 5, Mass Threshold: 1 tonnes of 10 tonnes Total VOC air release, Concentration threshold: N/A.
CEPA, Environmental Emergency Regulations	Xylene: Part 1 - Substances Likely to Explode. Concentration: ≥ 1% w/w. Volume (Minimum): 8000 tonnes (metric).
Non-Regional	
IARC Monographs**,** List of Classifications	Xylene: Yes - Group 3

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:
2; 3; 8; 11; 14; 16. Updated version and date. Please review SDS with care. See below -

Sections indicated with the following have been revised:

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Date of Issue: **12th November 2020**

References:
Existing Safety Data Sheet (SDS).
EU: Harmonised Classification(s) for Xylene (CAS No. 1330-20-7). Existing ECHA registration(s) for Xylene (CAS No. 1330-20-7).

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. Carpenter CP, Kinkead ER, Geary DJ, et al. (1975) Petroleum hydrocarbon toxicity studies: V. Animal and human response to vapors of mixed xylenes. Toxicol Appl Pharmacol 33:543-558
3. Walsh, Armstrong, Bartley, Salman and Frank. (1977) Residues of emulsfied xylene in aquatic weed control and their impact on rainbow trout. Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.
4. Hodson J and Williams NA. 1988. The estimation of the adsorption coefficient (Koc) for soils by high performance liquid chromatography. Chemosphere 17, 67-77.

LEGEND

LTEL: Long Term Exposure Limit
STEL: Short Term Exposure Limit
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration

IARC: International Agency for Research on Cancer
OSHA = Occupational Safety and Health Administration
ACGIH: American conference of Governmental Industrial Hygiene
TLV: Threshold Limit Value (ACGIH)
VOC: Volatile Organic Compound
CEPA: Canadian Environmental Protection Act

NTP: National Toxicology Program
NIOSHTIC: National Institute for Occupational Safety and Health Technical Information Center
BEI: Biological Exposure Indices (ACGIH)

TWA: Time Weighted Average
EU: European Union

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