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

1.1 Product identifier

Product Name	MCoat JA Part A
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.

1.2 Recommended use of the chemical and restrictions on use

Identified Use(s)	Sealants
Uses Advised Against	For professional users only.

1.3 Supplier's details

Company Identification	VISHAY MEASUREMENTS GROUP UK LTD Stroudley Road Basingstoke Hampshire RG24 8FW United Kingdom
Telephone	+44 (0) 1256 462131
Fax	+44 (0) 1256 471441
E-Mail (competent person)	mm.uk@vishaypg.com

1.4 Emergency Phone No.

(00-1) 703-527-3887
CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

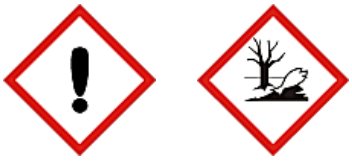
Acute Tox. 4; H302
Skin Irrit. 2; H315
Skin Sens. 1; H317
Eye Irrit. 2; H319
Aquatic Chronic 2; H411

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name: MCoat JA Part A

Hazard Pictogram(s)



Signal Word(s): Warning

Contains: Bis (piperidinothiocarbonyl) tetrasulphide

Hazard Statement(s):

H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

2.3 Other hazards None

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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)
Manganese dioxide	< 50	1313-13-9	215-202-6	None assigned.	Acute Tox. 4; H302 Acute Tox. 4; H332
Terphenyl, hydrogenated	< 50	61788-32-7	262-967-7	None assigned.	Aquatic Chronic 4; H413
Bis (piperidinothiocarbonyl) tetrasulphide	< 3	120-54-7	204-406-0	None assigned.	Skin Sens. 1; H317
Terphenyl	< 2	26140-60-3	247-477-3	None assigned.	Aquatic Chronic 1; H410 (MFAC: 10) Aquatic Acute 1; H400
Sodium hydroxide	< 1	1310-73-2	215-185-5	01-2119457892-27	Skin Corr. 1A; H314 (SCL ≥ 5%) Skin Corr. 1B; H314 (SCL ≥ 2 <5%) Skin Irrit. 2; H315 (≥ 0.5 < 2%) Eye Irrit. 2; H319 (≥ 0.5 < 2%)
Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-	< 0.5	9036-19-5	-	None assigned.	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412

MFAC: multiplying factor. SCL: Specific Concentration Limit. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation. H410: Very toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects. H413: May cause long lasting harmful effects to aquatic life.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation (redness, rash, blistering) develops, get medical 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 induce vomiting unless instructed to do so by medical personnel. Call a POISON CENTER/doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.
Unsuitable extinguishing media	Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes. Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulphur oxides, metal oxides.

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.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. Avoid all contact. Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8.

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

Small spillages:	Stop leak if safe to do so. Dilute with water. Adsorb spillages onto sand, earth or any suitable adsorbent material. Ventilate the area and wash spill site after material pick-up is complete. Transfer to a container for disposal. Dispose of this material and its container as hazardous waste (2008/98/EEC).
Large spillages:	Stop leak if safe to do so. Keep upwind. Adsorb spillages onto sand, earth or any suitable adsorbent material. Ventilate the area and wash spill site after material pick-up is complete. Transfer to a container for disposal. Dispose of this material and its container as hazardous waste (2008/98/EEC).

6.4 Reference to other sections

See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid all contact. Do not breathe vapour. Do not ingest. 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.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep away from heat, sources of ignition and direct sunlight.

Storage temperature	Store above (°C): 5 (41 °F)
Storage life	Stable under normal conditions.
Unsuitable containers:	None known.
Incompatible materials	Keep away from: Oxidizing agents and Acids. Keep from direct sunlight.

7.3 Specific end use(s)

Adhesives. See Section: 1.2

8. 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/m³)	STEL (ppm)	STEL (mg/m³)	Note
Terphenyls, all isomers	26140-60-3	-	-	0.5	4.8	WEL
Sodium hydroxide	1310-73-2	-	-	-	2	WEL

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

8.1.2	**Biological limit value**	Not established.
8.1.3	**PNECs and DNELs**	Not established.
8.2	**Exposure controls**	
8.2.1	**Appropriate engineering controls**	Ensure adequate ventilation. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Guarantee that the eye flushing systems and safety showers are located close to the working place.
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. Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
	Respiratory protection 	In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment.
	Thermal hazards	Not applicable.
8.2.3	**Environmental Exposure Controls**	Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Black, Liquid
Odour	Not determined.
Odour threshold	Not available.
pH	Not established.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 37.78 °C
Flash point	98.89 °C [Closed cup]
Evaporation rate	Not established.
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	0.27 kPa (2.03 mm Hg) @ 20°C
Vapour density	Terphenyl, hydrogenated: 7.95 (Air = 1)
Relative density	1.65 g/cm^3
Solubility(ies)	Insoluble in cold water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	> 0.21 cm2/s @ 40°C
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information None

10. 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**	Hazardous polymerisation will not occur.
10.4	**Conditions to avoid**	Keep away from heat, sources of ignition and direct sunlight.
10.5	**Incompatible materials**	Keep away from: Oxidizing agents and Acids.
10.6	**Hazardous decomposition product(s)**	Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulphur oxides, metal oxides.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity

Ingestion	Acute Tox. 4; Harmful if swallowed. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 994.4 mg/kg bw/day.
Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 22 mg/l.
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 Irrit. 2; Causes skin irritation.
Serious eye damage/irritation	Eye Irrit. 2; Causes eye irritation.
Respiratory or skin sensitization	Skin Sens. 1: May cause an allergic skin reaction.
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	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
Aspiration hazard	Based upon the available data, the classification criteria are not met.

11.2 Other information None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	**Toxicity**	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 >1 $\leq$ 10 mg/l (Fish)
12.2	**Persistence and degradability**	No data for the mixture as a whole.
12.3	**Bioaccumulative potential**	No data for the mixture as a whole.
12.4	**Mobility in soil**	The product is predicted to have low mobility in soil. Insoluble in cold water.
12.5	**Results of PBT and vPvB assessment**	Not classified as PBT or vPvB.
12.6	**Other adverse effects**	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	**Waste treatment methods**	This material and its container must be disposed of as hazardous waste (2008/98/EEC). Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
13.2	**Additional Information**	Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID / IMDG / IATA
14.1	**UN number**	UN 3082
14.2	**Proper Shipping Name**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Terphenyl)
14.3	**Transport hazard class(es)**	9
14.4	**Packing group**	III
14.5	**Environmental hazards**	Classified as a Marine Pollutant.

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

15. SECTION 15: REGULATORY INFORMATION

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**	
15.1.1	**EU regulations**	
	SVHCs	None
15.1.2	**National regulations**	Water hazard class: 2
15.2	**Chemical Safety Assessment**	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Sodium hydroxide (CAS No. 1310-73-2), Manganese dioxide (CAS No. 1313-13-9). Existing ECHA registration(s) for Manganese dioxide (CAS No. 1313-13-9), Terphenyl, hydrogenated (CAS No. 61788-32-7), Terphenyl (CAS No. 26140-60-3), Sodium hydroxide (CAS No. 1310-73-2), the Classification and Labelling Inventory for Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy- (CAS No. 9036-19-5), Bis (piperidinothiocarbonyl) tetrasulphide (CAS No. 120-54-7).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	**Classification Procedure**
Acute Tox. 4; H302	Acute Toxicity Estimate Mixture Calculation
Skin Irrit. 2; H315	Threshold Calculation
Skin Sens. 1; H317	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
Aquatic Chronic 2; H411	Summation Calculation

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

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.