Version: 3.0

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SECTION 1: IDENTIFICATION

Product identifier used on the label MCoat JA Part B

Other means of identification Not applicable

Recommended use of the chemical and restrictions

on use

Recommended use Sealants

Restrictions on use For professional users only.

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 Not classified

Health hazards Skin corrosion/irritation, Category 2

Skin Sensitisation, Category 1 Eye Irritation, Category 2

Specific target organ toxicity — single exposure, Category 3
Environmental hazards Hazardous to the aquatic environment, Chronic, Category 2

Hazard Symbol





Signal Word(s) WARNING

Hazard Statement(s) Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation.

Toxic to aquatic life with long lasting effects.

Precautionary Statement(s) Avoid breathing dust.

Wash hands and exposed skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

If skin irritation occurs: Get medical advice/attention.

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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

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Store in a well-ventilated place. Keep container tightly closed. Dispose of contents in accordance with local, state or national legislation.

Other hazards None known

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

0%

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	
Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-chloroethane] and sodium sulfide (Na2(Sx)), reduced	<50	68611-50-7	614-671-8	Skin corrosion/irritation, Category 2 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 - Respiratory Tract Hazardous to the aquatic environment, Chronic , Category 2	
Proprietary modified polysulfide polymer	<5	SUB120978	-	Skin corrosion/irritation, Category 2	
Ethyl acetate	<5	141-78-6	205-500-4	Flammable Liquid, Category 2 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 – Narcotic effects	
Proprietary modified polysulfide polymer	<5	SUB120976	-	Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 - Respiratory Tract	
Titanium dioxide	<3	13463-67-7	236-675-5	Not classified	
Proprietary modified polysulfide polymer	<3	SUB120979	-	Skin corrosion/irritation, Category 2	
3-aminopropyltriethoxysilane	<0.5	919-30-2	213-048-4	Acute toxicity, Category 4 – Oral Skin corrosion/irritation, Category 1B Skin Sensitisation, Category 1	
2,2'-thiodiethanethiol	<0.5	3570-55-6	222-671-0	Acute toxicity, Category 4 – Oral Acute toxicity, Category 4 – Dermal Acute toxicity, Category 4 – Inhalation Skin corrosion/irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Specific target organ toxicity — single exposure, Category 3 - Respiratory Tract	

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Self-protection of the first aider

Inhalation

Avoid breathing dust. 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.

IF INHALED: Remove victim to fresh air and keep at rest in a position

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comfortable for breathing. IF exposed or concerned:

advice/attention.

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.

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.

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. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye

irritation. May cause respiratory irritation.

Treat symptomatically.

Ingestion

Skin Contact

Eye Contact

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Unsuitable extinguishing Media

Special hazards arising from the substance or mixture

Special protective equipment and precautions for fire fighters

As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Do not use water jet. Direct water jet may spread the fire.

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, halogenated compounds.

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

Methods and material for containment and cleaning

Small spillages:

Large spillages:

Avoid breathing dust. Avoid contact with skin and eyes. Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8.

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.

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.

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.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing dust. Avoid contact with skin and eyes. 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

Conditions for safe storage, including any incompatibilities

Storage temperature

Storage life

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

Store above (°C): 5 (41 °F)

Stable under normal conditions.

None known

Keep away from: Oxidizing agents and Acids. Keep from direct sunlight.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Ethyl acetate	141-78-6	400	1400	-	-	NIOSH, OSHA
		400	-	-	-	ACGIH
Titanium dioxide	13463-67-7	-	-	-	-	NIOSH, Ca
						OSHA
		-	15	-	-	Total dust
		-	10	-	-	ACGIH, A4

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

Ca - Potential occupational carcinogens

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.

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

- · · ·	_		
Riological	Exposure	Indices	

Not established

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.

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

General hygiene measures for the handling of chemicals are applicable. Avoid all contact. Avoid breathing dust. 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Odor Odor Threshold pH

Melting Point/Freezing Point

Solid, beige Not determined. Not available. Not established. Not available.

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Initial boiling point and boiling range

Flash Point

Evaporation rate (Butyl acetate = 1)

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Vapour pressure

Not established.

Not established.

Not established.

Vapour pressure Not established.
Vapour density Not established.
Relative density 1.16 g/cm³

Solubility(ies) Insoluble in cold water.

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition Temperature

Viscosity

Not available.

Not available.

Not available.

Not applicable

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.

Conditions to avoid Keep away from heat, sources of ignition and direct sunlight.

Incompatible materials Keep away from: Oxidizing agents and Acids.

Hazardous decomposition product(s) Decomposes in a fire giving off toxic fumes: Carbon monoxide, Carbon dioxide,

Nitrogen oxides, Sulphur oxides, metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity - Skin Contact

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.

Acute toxicity - Inhalation Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20 mg/l.

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.

Serious eye damage/irritation Eye Irritation, Category 2; Causes eye irritation.

Respiratory or skin sensitization

Germ cell mutagenicity

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

Carcinogenicity

Reproductive toxicity

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

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

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 exposureBased upon the available data, the classification criteria are not met. **Aspiration hazard**Based upon the available data, the classification criteria are not met.

Information on likely routes of exposure

InhalationPossible – accidental exposureIngestionUnlikely – accidental exposureSkin ContactPossible – accidental exposureEye ContactUnlikely – accidental exposure

Early onset symptoms related to exposure Causes skin irritation. May cause an allergic skin reaction. Causes serious eye

irritation. May cause respiratory irritation.

Delayed health effects from exposure None known.

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1,1'-[methylenebis(oxy)]bis[2-

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Other information

NTP Report on Carcinogens

IARC Monographs

Other adverse effects

OSHA Designated Carcinogen

All chemicals are not listed

Titanium dioxide: Group 2B - Possibly carcinogenic to humans.

All chemicals are not listed

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.

Estimated Mixture LC50 >1 < 10 mg/l (Fish)

No data for the mixture as a whole. Persistence and degradability No data for the mixture as a whole. Bioaccumulative potential

Mobility in soil The product is predicted to have low mobility in soil. Insoluble in cold water.

Not classified as PBT or vPvB.

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods This material and its container must be disposed of as hazardous waste. Send

after pre-treatment to a appropriate hazardous waste incinerator facility

according to legislation.

Additional Information Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

ADR/RID IMDG IATA UN 3082 **UN** number UN 3082 UN 3082

1,1'-[methylenebis(oxy)]bis[2-

ENVIRONMENTALLY ENVIRONMENTALLY ENVIRONMENTALLY UN proper shipping name HAZARDOUS SUBSTANCE. HAZARDOUS SUBSTANCE. HAZARDOUS SUBSTANCE. LIQUID, N.O.S (Propane, LIQUID, N.O.S (Propane, LIQUID, N.O.S (Propane, 1,2,3-trichloro-, polymer with 1,2,3-trichloro-, polymer with 1,2,3-trichloro-, polymer with

> chloroethane] and sodium chloroethane] and sodium chloroethane] and sodium sulfide (Na2(Sx)), reduced) sulfide (Na2(Sx)), reduced) sulfide (Na2(Sx)), reduced)

Transport hazard class(es) 9 Packing group Ш Ш Ш

Environmental hazards Environmentally hazardous Classified as a Marine Environmentally hazardous substance Pollutant. substance

Transport in bulk according to Annex Not applicable. II of MARPOL 73/78 and the IBC Code

See Section: 2

Special precautions for user

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture **US Federal Regulations**

TSCA (Toxic Substance Control Act) Propane, 1,2,3-trichloro-, polymer with 1,1'-[methylenebis(oxy)]bis[2-

chloroethane] and sodium sulfide (Na2(Sx)), reduced: Exempt from reporting

under CDR

Ethyl acetate: Subject to 25,000 lb reporting threshold Titanium dioxide: Subject to 25,000 lb reporting threshold

1,1'-[methylenebis(oxy)]bis[2-

3-aminopropyltriethoxysilane: Subject to 25,000 lb reporting threshold 2,2'-thiodiethanethiol: Subject to 25,000 lb reporting threshold

EPCRA/SARA Section 302 Extremely Hazardous All chemicals are not listed

Substances

EPCRA Section 313 Toxics Release Inventory (TRI)

Program

OSHA List of highly hazardous chemicals, toxics and

All chemicals are not listed

NIOSH Occupational Carcinogen List All chemicals are not listed All chemicals are not listed

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reactives

NTP Report on Carcinogens (RoC) List Poison Prevention Packaging Act

US State Regulations

California State, Proposition 65 List

California State, Safer Consumer Products Regulations Maine State, Toxic Chemicals in Children's Products Act New Jersey State Worker and Community RTK Act

Pennsylvania State, Worker and Community RTK Act

Rhode Island State, Hazardous Substances RTK Act

Non-Regional

IARC Monographs, List of Classifications

All chemicals are not listed All chemicals are not listed

Titanium dioxide: Airborne, unbound particles of respirable size

Titanium dioxide: Candidate Chemicals List)

All chemicals are not listed Ethyl acetate: RTKHSL. SHHSL Titanium dioxide: RTKHSL

Ethyl acetate: Hazardous Substance List. Environmental Hazard List

Titanium dioxide: Hazardous Substance List Ethyl acetate: Hazardous Substance List Titanium dioxide: Hazardous Substance List

Titanium dioxide: Group 2B - Possibly carcinogenic to humans.

Titanium dioxide is listed by IARC as a Group 2B substance (possibly carcinogenic to humans), however, IARC mongraphs Vol. 93 states that exposure levels are assumed to be lower in the user industries, with the possible exception of workers who handle large quantities of titanium dioxide. Titanium dioxide in this mixture is mostly in a bound form. Therefore no significant exposure to titanium dioxide is thought to occur during the use of this product.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / 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: 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).

GHS Classification of the substance or mixture	Classification Procedure	
Skin corrosion/irritation, Category 2	Threshold Calculation	
Skin Sensitisation, Category 1	Threshold Calculation	
Eye Irritation, Category 2	Threshold Calculation	
Specific target organ toxicity — single exposure, Category 3	Threshold Calculation	
Hazardous to the aquatic environment, Chronic , Category 2	Summation 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

Skin": 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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