

SAFETY DATA SHEET

Revision: 1.1 Date: 16.07.2015

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),
1272/2008 (CLP) & 453/2010

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

1.1 Product identifier

Product Name	M-Coat B
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)	PC9a Coatings and paints, thinners, paint removers
Uses Advised Against	None known.

1.3 Supplier's details

Company Identification	Vishay Measurements Group, Inc. Post Office Box 27777 Raleigh, NC 27611 USA
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Telephone	919-365-3800
Fax	919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com

1.4 Emergency Phone No.

CHEMTREC 1-800-424-9300 (U.S.)
CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1 GHS Classification

Flam. Liq. 2; Highly flammable liquid and vapour.
Eye Irrit. 2; Causes serious eye irritation.
STOT SE 3; Specific target organ toxicity — single exposure 3 (Central nervous system)

2.2 Label elements

Product Name	According to Regulation (EC) No. 1272/2008 (CLP) M-Coat B (Control # 1072 and Higher)
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Hazard Pictogram(s)



Signal Word(s)

Danger

Hazard Statement(s)

H226: Flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.

Precautionary Statement(s)

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P261: Avoid breathing vapours.
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.
P337+P313: If eye irritation persists: Get medical advice/attention.
P308+P313: IF exposed or concerned: Get medical advice/attention.

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2.3 Other hazards None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Substances in preparations / mixtures

3.2 Mixtures
GHS Classification

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard Statement(s)
butanone	>70	78-93-3	201-159-0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

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. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. 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 with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.

4.2 Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness. Central nervous depression. Causes eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing Media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere.

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

Ensure adequate ventilation. Shut off leaks if without risk. Eliminate sources of ignition. Avoid breathing vapours. Wear protective gloves/protective clothing/eye

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- 6.2 **Environmental precautions** protection/face protection. Evacuate if necessary.
- 6.3 **Methods and material for containment and cleaning up** Do not allow to enter drains, sewers or watercourses.
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. Dispose of this material and its container as hazardous waste. Do NOT wash away into sewer. Allow to evaporate.
- 6.4 **Reference to other sections** See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

- 7.1 **Precautions for safe handling** Ensure adequate ventilation. Do not breathe vapour. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
- 7.2 **Conditions for safe storage, including any incompatibilities** Ground/bond container and receiving equipment. The electrical system should be spark-free. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight.
Storage temperature Ambient.
Storage life Stable under normal conditions.
Incompatible materials Keep away from: Flammable liquid, Oxidizing agents, Corrosive Substances, Alcohols.
- 7.3 **Specific end use(s)** Coatings / Paint Applications.

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/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
Butan-2-one (methyl ethyl ketone)	78-93-3	200	590	300	885	USA - NIOSH
		200	590	-	-	USA - OSHA

Note:: Sk - Can be absorbed through skin.

- 8.1.2 **Biological limit value** Not established.

8.1.3 PNECs and DNELs

DNEL (Methyl ethyl ketone)	Oral	Inhalation	Dermal
Industry - Long Term - Systemic effects	-	1161 mg/m ³	600 mg/kg bw/day
Consumer - Long Term - Systemic effects	31 mg/kg bw/day	106 mg/m ³	412 mg/kg bw/day

PNEC	Methyl ethyl ketone
Aquatic Compartment	PNEC aqua (freshwater / marine water / intermittent releases) 55.8 mg/L PNEC STP 709 mg/L PNEC sediment (freshwater/marine water) 284.7 mg/kg sediment dw PNEC oral 1000 mg/kg food
Terrestrial Compartment	PNEC soil 22.5 mg/kg soil dw

- 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.
- 8.2.2 **Individual protection measures, such as personal protective equipment (PPE)** Use personal protective equipment as required. Wash contaminated clothing before reuse. Avoid contact with skin and eyes.

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Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection



Wear impervious gloves (EN374). Nitrile rubber, Butyl rubber. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Unsuitable gloves materials: Natural rubber / PVC.

Respiratory protection



Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection. 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.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	Physico-chemical properties of substance Butan-2-one
Appearance	Viscous tan Coloured liquid
Odour	Ketone Odour
Odour Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	-86°C
Initial boiling point and boiling range	82.3°C (Mixture)
Flash Point	-9 °C [Closed cup]
Evaporation Rate	1 (BuAc = 1)
Flammability (solid, gas)	Flam. Liq. 2; Flammable liquid and vapour.
Upper/lower flammability or explosive limits	LEL: 2.0 UEL: 10.0
Vapour pressure	12.6 kPa at 25°C
Vapour density	>1 (Air = 1)
Relative density	0.81 g/cm ³ (H ₂ O = 1)
Solubility(ies)	>10% (Water)
Partition coefficient: n-octanol/water	0.3 log Pow (40 °C)
Auto-ignition temperature	404 °C
Decomposition Temperature	Not available.
Viscosity	2.038 mPa s (Dynamic viscosity) 25 °C
Explosive properties	Not available.
Oxidising properties	Not oxidising.
9.2 Other information	Volatile Organic Compound Content: 675 g/liter

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Highly flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.
10.4 Conditions to avoid	Keep away from heat, sources of ignition and direct sunlight.
10.5 Incompatible materials	Flammable liquid, Oxidizing agents, Corrosive Substances, Alcohols, Strong Acids and Alkalis.
10.6 Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide.

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11. SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity

Ingestion

Not classified.

Inhalation

STOT SE 3: May cause drowsiness and dizziness. Central nervous depression.

Skin Contact

Not classified.

Eye Contact

Eye Irrit. 2

Irritation

Eye Irrit. 2; Moderate irritant to rabbit eyes. (OECD 405)

Corrosivity

Not classified.

Sensitisation

Not classified.

Repeated dose toxicity

Not classified.

Carcinogenicity

No evidence of carcinogenicity.

Mutagenicity

There is no evidence of mutagenic potential.

Toxicity for reproduction

No data.

11.2 Other information

NTP: Not listed

IARC Monographs: Not listed

OSHA Regulated: Not listed

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not classified as a Marine Pollutant.

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

The product is predicted to have high mobility in soil. Water Soluble.

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 an 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

14.1 UN number

ADR/RID / IMDG / IATA

UN 1193

14.2 Proper Shipping Name

ETHYL METHYL KETONE (METHYL ETHYL KETONE)

14.3 Transport hazard class(es)

3

14.4 Packing group

II

14.5 Environmental hazards

Not classified as a Marine Pollutant.

14.6 Special precautions for user

Causes serious eye irritation.

14.7 Transport in bulk according to Annex II of MARPOL73/78 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

Not Listed.

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16. SECTION 16: OTHER INFORMATION

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

References: Existing Safety Data Sheet (SDS) and Existing ECHA registration(s) for ethyl methyl ketone (CAS# 78-93-3).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Flam. Liq. 2; H226	Harmonised Classification
Eye Irrit. 2; H319	Harmonised Classification
STOT SE 3; H336	Harmonised Classification

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	vPvT: very Persistent and very Toxic
OECD	Organisation for Economic Cooperation and Development

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.