Material Safety Data Sheet

METHYL ISOBUTYL CARBINOL (RXSOL-19-3792-170)

1. Product and Company Identifaction

Product Name	METHYL ISOBUTYL CARBINOL
Part Number	RXSOL-19-3792-025

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone	+91 22 20871200 - 1400
Fax	+91 22 27612100 :::AOH :0091 9821214367
Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / informationon ingredients

Substances

Name	CAS-No.	%
Methyl Isobutyl Carbinol	108-11-2	100

3. Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Flammable liquids, Category 3 H226 Acute toxicity (inhal.), Category 4 H332 Serious eye damage/eye irritation, Category 2 H319 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Xi; R37 R10
Adverse physicochemical, human health and environmental effects	No additional information

Label elements

Signal word (CLP)	Warning
Hazard statements (CLP)	H226 - Flammable liquid and vapour. H319 - Causes serious eye irritation. H332 - Harmful if inhaled. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	P261 - Avoid breathing vapours, spray, dust, fume, gas. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER or doctor if you feel unwell. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool.

Other hazards	No additional information available

4. First Aid Measures

Description of first aid measures

First-aid measures after inhalation	Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash with plenty of water/…. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get immediate medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	Rinse mouth. Do not induce vomiting. Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after eye contact	Causes eye irritation.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically

5. Fire-fighting Measures

Extinguishing media

Suitable extinguishing media	Carbon dioxide. Dry powder. Foam. Water spray
Unsuitable extinguishing media	Do not use a heavy water stream.
Specific hazards arising from the chemical	
Fire hazard	Flammable liquid and vapour
Explosion hazard	May form flammable/explosive vapour-air mixture.
Advice for firefighters	
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

General measures	Remove ignition sources. No open flames. No smoking. Use special care to avoid static electric charges.
For non-emergency personnel	
Emergency procedures	Evacuate unnecessary personnel.
For emergency responders	
Protective equipment	Use personal protective equipment as required.
Emergency procedures	Ventilate area.
Environmental precautions	Avoid release to the environment.
Methods and material for containment and cleaning up	
Methods for cleaning up	Collect spillage. On land, sweep or shovel into suitable containers.
Reference to other sections	No additional information available

7. Handling and Storage

Precautions for safe handling

Precautions for safe handling	Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. Take precautionary measures against static discharge.

Hygiene measures	Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Storage conditions	Keep in fireproof place. Keep container tightly closed.
Incompatible materials	Heat sources
Specific end use(s)	No additional information

8. Exposure controls and personal protection

Control parameters	No additional information available
Exposure controls	
Hand protection	Protective gloves
Eye protection	Chemical goggles or safety glasses
Skin and body protection	Wear suitable protective clothing
Respiratory protection	In case of inadequate ventilation] wear respiratory protection

9. Physical and chemical properties

Physical state	Liquid
Molecular mass	102.17 g/mol
Colour	Colourless
Odour	No data available
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	-90 °C
Freezing point	No data available
Boiling point	132 °C
Flash point	41 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	4.9 hPa at 20°C
Relative vapour density at 20 °C	No data available
Relative density	4.09
Density	0.802 g/cm³ at 25°C
Solubility	Water: 21.8 g/l at 20°C
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	5.5 - 1 vol %
Other information	No additional information available

10. Stability and reactivity

Reactivity	No additional information available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No additional information available
Conditions to avoid	Open flame. Heat. Sparks.

Incompatible materials	No additional information available
Hazardous decomposition products	No additional information available

11. Toxicological information

Acute toxicity	Inhalation: Harmful if inhaled.
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

12. Ecological information

Toxicity	No additional information available
Persistence and degradability	No additional information available
Bioaccumulative potential	No additional information available
Mobility in soil	No additional information available
Results of PBT and vPvB assessment	No additional information available
Other adverse effects	No additional information available

13. Disposal considerations

Waste Treatment Methods	No additional information available

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

UN number	
UN-No. (ADR)	2053
UN-No. (IMDG)	2053
UN-No. (IATA)	2053
UN-No. (ADN)	2053
UN-No. (RID)	2053
UN proper shipping name	
Proper Shipping Name (ADR)	METHYL ISOBUTYL CARBINOL
Proper Shipping Name (IMDG)	METHYL ISOBUTYL CARBINOL
Proper Shipping Name (IATA)	Methyl isobutyl carbinol
Proper Shipping Name (ADN)	METHYL ISOBUTYL CARBINOL
Proper Shipping Name (RID)	METHYL ISOBUTYL CARBINOL
Transport document description (ADR)	UN 2053 METHYL ISOBUTYL CARBINOL, 3, III, (D/E)
Transport document description (IMDG)	UN 2053 METHYL ISOBUTYL CARBINOL, 3, III (41°C c.c.)
Transport document description (IATA)	UN 2053 Methyl isobutyl carbinol, 3, III
Transport document description (ADN)	UN 2053 METHYL ISOBUTYL CARBINOL, 3, III
Transport document description (RID)	UN 2053 METHYL ISOBUTYL CARBINOL, 3, III
Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	3

Danger labels (ADR)	3
IMDG	
Transport hazard class(es) (IMDG)	3
Danger labels (IMDG)	3
IATA	
Transport hazard class(es) (IATA)	
Hazard labels (IATA)	
ADN	
Transport hazard class(es) (ADN)	3
Danger labels (ADN)	3
RID	
Transport hazard class(es) (RID)	3
Danger labels (RID)	3
Packing group	
Packing group (ADR)	III
Packing group (IMDG)	III
Packing group (IATA)	III
Packing group (ADN)	III
Packing group (RID)	III
Environmental hazards	
Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available

Special precautions for user

- Overland transport	
Classification code (ADR)	F1
Limited quantities (ADR)	5l
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	MP19
Portable tank and bulk container instructions (ADR)	T2
Portable tank and bulk container special provisions (ADR)	TP1
Tank code (ADR)	LGBF
Vehicle for tank carriage	FL
Transport category (ADR)	3
Special provisions for carriage - Packages (ADR)	V12
Special provisions for carriage - Operation (ADR)	S2
Hazard identification number (Kemler No.)	30
Tunnel restriction code (ADR)	D/E
- Transport by sea	
Packing instructions (IMDG)	P001, LP01
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	T2
Tank special provisions (IMDG)	TP1
EmS-No. (Fire)	F-E
EmS-No. (Spillage)	S-D
Stowage category (IMDG)	A
Flash point (IMDG)	41°C c.c.

Properties and observations (IMDG)	Colourless liquid. Flashpoint: 41°C c.c. Explosive limits: 1% to 5.5% Miscible with water. Harmful by inhalation.
- Air transport	
PCA Excepted quantities (IATA)	E1
PCA Limited quantities (IATA)	Y344
PCA limited quantity max net quantity (IATA)	10L
PCA packing instructions (IATA)	355
PCA max net quantity (IATA)	60L
CAO packing instructions (IATA)	366
CAO max net quantity (IATA)	220L
ERG code (IATA)	3L
- Inland waterway transport	
Classification code (ADN)	F1
Limited quantities (ADN)	5 L
Excepted quantities (ADN)	E1
Carriage permitted (ADN)	T
Equipment required (ADN)	PP, EX, A
Ventilation (ADN)	VE01
Number of blue cones/lights (ADN)	0
- Rail transport	
Classification code (RID)	F1
Excepted quantities (RID)	E1
Packing instructions (RID)	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	MP19
Portable tank and bulk container instructions (RID)	T2
Portable tank and bulk container special provisions (RID)	TP1
Tank codes for RID tanks (RID)	LGBF
Transport category (RID)	3
Special provisions for carriage – Packages (RID)	W12
Colis express (express parcels) (RID)	CE4
Hazard identification number (RID)	30
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations	No REACH Annex XVII restrictions METHYL ISOBUTYL CARBINOL FOR SYNTHESIS is not on the REACH Candidate List METHYL ISOBUTYL CARBINOL FOR SYNTHESIS is not on the REACH Annex XIV List
Netherlands	
SZW-lijst van kankerverwekkende stoffen	The substance is not listed
SZW-lijst van mutagene stoffen	The substance is not listed
NIET-limitative list van voor de voot planting gifting stoffen – Borstvoeding	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	The substance is not listed
Denmark	
Class for fire hazard	Class II-1
Store unit	5 liter

Classification remarks	R10 ; Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation	Young people below the age of 18 years are not allowed to use the product
Chemical safety assessment	No additional information available

16. Other information

Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

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