

1. Product and Company Identification

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

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
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2. Composition / Information on ingredients

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Substances

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

3. Hazards Identification

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Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, H226
Category 3
Acute toxicity (inhal.), H332
Category 4
Serious eye damage/eye irritation, Category 2
Specific target organ toxicity - Single exposure, Category 3,
Respiratory tract irritation

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Xi; R37

R10
No additional information

Adverse physicochemical, human health and environmental effects

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

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Description of first aid measures

First-aid measures after inhalation
 First-aid measures after skin contact

 First-aid measures after eye contact

 First-aid measures after ingestion

Assure fresh air breathing. Allow the victim to rest.
 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.
 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
 Rinse mouth. Do not induce vomiting. Get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation
 Symptoms/effects after eye contact

Harmful if inhaled. May cause respiratory irritation.
 Causes eye irritation.

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

5. Fire-fighting Measures

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Extinguishing media

Suitable extinguishing media
 Unsuitable extinguishing media

Carbon dioxide. Dry powder. Foam. Water spray
 Do not use a heavy water stream.

Specific hazards arising from the chemical

Fire hazard
 Explosion hazard

Flammable liquid and vapour
 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

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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

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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

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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

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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/cm ³ 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

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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

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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

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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

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Waste Treatment Methods

No additional information available

14. Transport information

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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)	51
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	MP19
Portable tank and bulk container	T2

instructions (ADR)

Portable tank and bulk container special	TP1
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provisions (ADR)

Tank code (ADR)	LGBF
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Vehicle for tank carriage	FL
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Transport category (ADR)	3
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Special provisions for carriage - Packages	V12
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(ADR)

Special provisions for carriage - Operation	S2
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(ADR)

Hazard identification number (Kemler No.)	30
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Tunnel restriction code (ADR)	D/E
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- Transport by sea

Packing instructions (IMDG)	P001, LP01
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IBC packing instructions (IMDG)	IBC03
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Tank instructions (IMDG)	T2
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Tank special provisions (IMDG)	TP1
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EmS-No. (Fire)	F-E
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EmS-No. (Spillage)	S-D
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Stowage category (IMDG)	A
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Flash point (IMDG)	41°C c.c.
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Properties and observations (IMDG)	Colourless liquid. Flashpoint: 41°C c.c. Explosive limits: 1% to 5.5% Miscible with water. Harmful by inhalation.
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- Air transport

PCA Excepted quantities (IATA)	E1
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PCA Limited quantities (IATA)	Y344
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PCA limited quantity max net quantity (IATA)	10L
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PCA packing instructions (IATA)	355
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PCA max net quantity (IATA)	60L
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CAO packing instructions (IATA)	366
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CAO max net quantity (IATA)	220L
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ERG code (IATA)	3L
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- Inland waterway transport

Classification code (ADN)	F1
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Limited quantities (ADN)	5 L
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Excepted quantities (ADN)	E1
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Carriage permitted (ADN)	T
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Equipment required (ADN)	PP, EX, A
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Ventilation (ADN)	VE01
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Number of blue cones/lights (ADN)	0
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- Rail transport

Classification code (RID)	F1
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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

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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-limitatieve list van voor de voet planting giftige stoffen ☑ Borstvoeding	The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen ☑	The substance is not listed
Vruchtbaarheid	
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

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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,
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