1. Product and Company Identifaction

www.rxmarine.com

Porduct Name Methyl Ethyl Ketone LR Grade

Part Number RXSOL-60-1212-025

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

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 Email
 mail@rxmarine.com

 Website
 www.rxmraine.com

2. Composition / Information on ingredients

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Product name Cas No EC No Weight Formula Ethyl methyl ketone 78-93-3 201-159-0 72,11 g/mol C_4H_8O

3. Hazards Identification

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Signal Word Danger

Hazard Statements H225 Highly flammable liquid and vapor. H319 Causes serious eye

irritation. H336 May cause drowsiness or dizziness.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use non-sparking tools. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Classification of the substance or mixture

No data available

Supplemental Hazard Statements No data available

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very

bioaccumulative (vPvB) at levels of 0.1% or higher. The

substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher.

4. First Aid Measures

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General advice Show this material safety data sheet to the doctor in attendance

If inhaled After inhalation fresh air. Call in physician.

Eye Contact: rinse out with plenty of water. Call in ophthalmologist.

Remove contact lenses.

Swallowed After swallowing: immediately make victim drink water (two glasses at

most). Consult a physician.

Skin Contact In case of skin contact: Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

Inhalation No data available Ingestion No data available

Most important symptoms and effects, both acute and delaye The most important known symptoms and effects are described in the

labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment

needed

No data available

5. Fire-fighting Measures

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Flammability No data available

Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder

For this substance/mixture no limitations of extinguishing agents are Unsuitable extinguishing media

given.

Special hazards arising from the substance or mixture Carbon oxides Combustible. Pay attention to flashback. Vapors are

> heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive

mixtures with air at ambient temperatures.

Further information Remove container from danger zone and cool with water. Prevent fire

extinguishing water from contaminating surface water or the ground water

system.

Hazardous combustion No data available

products

Advice for firefighters In the event of fire, wear self-contained breathing apparatus...

Protective Equipment No data available No data available Specific Hazards Arising from the Chemical

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols.

Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

No data available Spillage

Personal Protection No data available

Environmental Precaution Do not let product enter drains. Risk of explosion.

Methods and materials for Cover drains. Collect, bind, and pump off spills. Observe possible containment and cleaning material restrictions (see sections 7 and 10). Take up with liquid-

absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up

affected area.

Reference to other sections For disposal see section 13.

7. Handling and Storage

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Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take

precautionary measures against static discharge.

Incompatible materials No data available

Hygiene measures Change contaminated clothing. Preventive skin protection recommended.

Wash hands after working with substance. For precautions see section 2.2.

Advice on safe handling Work under hood. Do not inhale substance/mixture. Avoid generation of

vapours/aerosols

Conditions for safe storage including any incompatibilities No data available Storage conditions Protected from light. Keep container tightly closed in a dry and well-

ventilated place. Keep away from heat and sources of ignition.

Recommended storage temperature see product label.

Storage class Storage class (TRGS 510)3 Flammable liquids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are

stipulated

Advice on general occupational hygiene No data available

8. Exposure controls and personal protection

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Exposure controls Personal protective equipment

Engineering Control No data available

government standards such as NIOSH (US) or EN 166(EU). Safety

glasses

Body Protection Flame retardant antistatic protective clothing.

Skin protection This recommendation applies only to the product stated in the safety data

sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break

through time: 240 min Material tested:Butoject® (KCL 898)

Respiratory protection Recommended Filter type Filter A (acc. to DIN 3181) for vapours of

organic compounds The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

properly documented

Other Protection Measure No data available

9. Physical and chemical properties

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Physical state Liquid
Colour Colorless

Odour No data available
Odor Threshold No data available
pH No data available

Melting Point -87 °C

Boiling Point 79,6 °C at 1.013 hPa
Flash Point -1 °C - closed cup
Evaporation Rate No data available
Flammability (solid, gas) No data available
Explosive limits No data Available

Upper/lower flammability or explosive limits Upper explosion limit 10,1 %(V) Lower explosion limit1,8 %(V)

Autoignition temperature

Decomposition temperature

No data available

No data available

Vapour pressure

95 hPa at 20 °C

Viscosity Dynamic 0,41 mPa.s at 20 °C

Density 0,805 g/cm3 at 20 °C
Relative Density No data available
Specific Gravity No data available

Partition coefficient Log Pow 0,3 at 40 °C - Bioaccumulation is not expected.

Explosive properties No data available

Solubility Soluble

Ignition temperature No data available
Particle characteristics No data available

10. Stability and reactivity

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Reactivity Vapors may form explosive mixture with air.

Chemical stability The product is chemically stable under standard ambient conditions (room

temperature)

Possibility of hazardous reactions Risk of ignition or formation of inflammable gases or vapours with:

Exothermic reaction with Oxidizing agents alkali hydroxides

chromium(VI) oxide Risk of explosion with: hydrogen peroxide Nitric

acid conc. sulfuric acid

Conditions to avoid Warming
Incompatible materials Various plastics

Hazardous decomposition products Peroxides In the event of fire: see section 5

11. Toxicological information

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Acute toxicity

Skin corrosion/irritation
Serious eye damage/irritation

Respiratory or skin sensitization

Carcinogenicity

Germ cell mutagenicity

Reproductive toxicity

Specific target organ toxicity - single exposure

Additional Information

 $LD50\ Oral\ -\ Rat\ -\ male\ and\ female\ -\ 2.193\ mg/kg\ (OECD\ Test\ Guideline\ 423)\ LC50\ Inhalation\ -\ Mouse\ -\ 4\ h\ -\ 32.000\ mg/m3\ -\ vapor\ Remarks:\ (RTECS)\ LD50\ Dermal\ -\ Rabbit\ -\ 6.480\ mg/kg\ Remarks:\ (RTECS)$

Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404

Eyes - Rabbit Result: Severe irritations (OECD Test Guideline 405) Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Buehler Test - Guinea pig Result: negative (OECD Test Guideline 406)

No data available

Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: rat hepatocytes Method: OECD Test Guideline 473 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Micronucleus test Species: Mouse Cell type: Bone marrow Application Route: Intraperitoneal

Method: OECD Test Guideline 474

No data available

May cause drowsiness or dizziness

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Central nervous system depression, Gastrointestinal disturbance, narcosis To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Liver - Irregularities - Based on Human Evidence

12. Ecological information

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Persistence and degradability

Toxicity to fish

Toxicity to daphnia and other aquatic invertebrates

Biodegradability aerobic - Exposure time 28 d Result: 98 % - Readily biodegradable. (OECD Test Guideline 301D) Theoretical oxygen demand 2.440 mg/g (Lit.) Ratio BOD/ThBOD 76 % (IUCLID

Static test LC50 - Pimephales promelas (fathead minnow) - 2.993 mg/l - 96 h (OECD Test Guideline 203)

Static test EC50 - Daphnia magna (Water flea) - 308 mg/l - 48 h (OECD Test Guideline 202)

Toxicity No data available Toxicity to bacteria No data available

Toxicity to algae Static test ErC50 - Pseudokirchneriella subcapitata - 1.972 mg/l - 72 h

(OECD Test Guideline 201)

Products Biodegradation No data available Mobility in soil No data availalble

Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either

persistent, bioaccumulative and toxic (PBT), or very persistent and very

bioaccumulative (vPvB) at levels of 0.1% or higher.

The substance/mixture does not contain components considered to have Endocrine disrupting properties

endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher

Other adverse effects No data available

13. Disposal considerations

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Product See www.retrologistik.com for processes regarding the return of

chemicals and containers, or contact us there if you have further

questions.

No data available Contaminated packaging Waste treatment Method No data available

14. Transport information

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ADR/RID:1193 IMDG:1193 IATA:1193 UN number

ADR/RID:ETHYL METHYL IMDG:ETHYL METHYL IATA:ETHYL METHYL KETONE UN proper shipping name

> KETONE KETONE

ADR/RID:3 IMDG:3 Transport hazard class(es) IATA:3 Packaging group ADR/RID:ll IMDG:11 IATA:11 Environmental hazards ADR/RID:No IMDG:No IATA:No

Special precautions for user Tunnel restriction code (D/E)

Further information No data available

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the This material safety data sheet complies with the requirements of substance or mixture

Other regulations

Chemical Safety Assessment

Regulation (EC) No. 1907/2006.

Take note of Dir 94/33/EC on the protection of young people at work. A Chemical Safety Assessment has been carried out for this substance.

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, 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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