1. Product and Company Identifaction

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Product Name DI METHYL AMINE SOL
Part Number RXSOL-19-1139-025

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

Emailmail@rxmarine.comWebsitewww.rxmraine.comA

2. Composition / Information on ingredients

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Chemical Name CAS EC number Weight Formula Dimethylamine solution 124-40-3 204-697-4 >= 30 - < 50 % C₂H₇N

3. Hazards Identification

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Signal Word Danger

Hazard Statements H225 Highly flammable liquid and vapor. H314 Causes severe skin burns

and eye damage. H335 May cause respiratory irritation. H412 Harmful to

aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P273

Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water. 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 Not a hazardous substance or mixture according to Regulation (EC) No

1272/2008.

Supplemental Hazard Statements None.

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. Lachrymator.

4. First Aid Measures

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General advice First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled After inhalation: fresh air. Call in physician.

Eye Contact After eye contact: rinse out with plenty of water. Immediately call in

ophthalmologist. Remove contact lenses.

Swallowed After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not

attempt to neutralise.

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

Rinse skin with water/ shower. Call a physician immediately.

Inhalation Remove patient to fresh air, keep warm and at rest and get medical

assistance in necessary.

Ingestion Rinse mouth with water. Do not induce vomiting. Never give anything by

mouth to an unconscious person. Call a doctor or Poison Control Center

immediately

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 No data available

needed

5. Fire-fighting Measures

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Flammability Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

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

given.

Special hazards arising from the substance or mixture Carbon oxides Nitrogen oxides (NOx) Mixture with combustible

> ingredients. 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. Suppress

(knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water

system.

Hazardous combustion Fire may cause the evolution of Sulphur oxides, nitrogen oxides.

products

Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent

skin contact by keeping a safe distance or by wearing suitable protective

clothing.

Protective Equipment Use personal protective equipment.

Specific Hazards Arising from the Chemical Oxides of phosphorus Sodium oxides Not combustible. Fire may cause

evolution of: Oxides of phosphorus Ambient fire may liberate hazardous

vapours.

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.

Spillage

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition

sources. Call for assistance on disposal.

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

Methods and materials for containment and cleaning

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquidabsorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area..

7. Handling and Storage

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Advice on protection against fire and explosion

Incompatible materials

Hygiene measures

Precautions for safe handling

Storage conditions

Storage class

Specific end use(s)

Advice on general occupational hygiene

Requirements for storage

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

For precautions see section 2.2.

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Storage class (TRGS 510): 3: Flammable liquids

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

Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

Keep in cool and store under shade.

8. Exposure controls and personal protection

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Exposure controls

Control parameters

Engineering Control

Eye/face protection

Body Protection Skin protection

Respiratory protection

Other Protection Measure Control of environmental exposure Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Flame retardant antistatic protective clothing.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact Material: butyl-rubber Minimum layer thickness: 0,3 mm Break through time: 480 min Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,2 mm Break through time: 30 min Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK 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.

Handle in accordance with good industrial hygiene and safety practice.

Do not let product enter drains. Risk of explosion.





Gloves Suit

9. Physical and chemical properties

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Physical state Clear, liquid Colour Colorless

Odour No data available Odor Threshold No data available pН No data available Melting Point No data available **Boiling Point** No data available Flash Point 16 °C - closed cup **Evaporation Rate** Not Applicable Flammability (solid, gas) No data available Explosive limits No Data Available Upper/lower flammability or explosive limits 14,4 %(V) / 2,8 %(V) Autoignition temperature No Data Available Decomposition temperature No data available 1.170 hPa at 55 °C Vapour pressure

Density 0,890 g/cm3 Relative Density No data available Relative vapor density No data available Freezing point No data available Viscosity No data available Partition coefficient No data available Explosive properties No data available 20 °C soluble Solubility

Ignition temperature No information available.

Particle characteristics No data available

10. Stability and reactivity

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Reactivity Vapors may form explosive mixture with air.

Stability The product is chemically stable under standard ambient conditions (room

temperature).

Possibility of hazardous reactions No data available

Conditions to avoid Warming.

Incompatible materials Peroxides, permanganates, for example potassium permanganate,

Oxidizing agents

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

11. Toxicological information

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Acute toxicity Oral: No data available Inhalation: No data available Dermal: No data

available

Skin corrosion/irritation Remarks: Mixture causes burns.

Serious eye damage/eye irritation Remarks: Mixture causes serious eye damage. Risk of blindness!

Respiratory or skin sensitization No data available Carcinogenicity No data available

Germ cell mutagenicity

No data available
Reproductive toxicity

No data available

Specific target organ toxicity - single exposure Mixture may cause respiratory irritation.

Special Remarks on other Toxi Effects on Humans

Acute Potential Health Effects: Skin: C

Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, which becomes evident upon reexposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation

may affect respiration and metabolism.

Endocrine disrupting properties

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. To the best of our length of the observing of the observing of the properties have not because of the 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. To the best of our length of the 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. To the best of our

knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety

practice.

12. Ecological information

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Bioaccumulative potential No data available

Persistence and degradability Biodegradability Result: - Readily biodegradable.

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 17 mg/l - 96 h Remarks:

(ECHA)

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 46 mg/l - 48 h Remarks:

(ECOTOX Database)

Toxicity to algae Static test ErC50 - Pseudokirchneriella subcapitata - 6,2 mg/l - 96 h

Remarks: (ECOTOX Database)

Toxicity to bacteria Static test EC10 - activated sludge - > 1.000 mg/l - 30 min (ISO 8192)

Remarks: Aqueous solution

Mobility in soil No Information available

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 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.

No data available

13. Disposal considerations

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Disposal methods

Other adverse effects

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Dispose of as unused product.

Contaminated packaging

Endocrine disrupting properties

Waste treatment Method

See www.retrologistik.com for processes regarding the return chemicals and containers, or contact us there if you have further questions.

14. Transport information

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UN number

UN proper shipping name

ADR/RID: 1160 IMDG: 1160 IATA: 1160 ADR/RID:Dimethylamine, aqueous solution

IMDG:Dimethylamine, aqueous solution

IATA:Dimethylamine, aqueous solution

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)

ADR/RID: II IMDG: II IATA: II ADR/RID: NO IMDG: NO IATA: NO

No data available

Transport hazard class(es) Packaging group Environmental hazards

Further information

15. Regulatory information

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Inventory status

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

National legislation

Other regulations

Chemical Safety Assessment

Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian AICS, Korean, Philippine PICCS and Chinese Xi irritant R 36/38 Irritant to eyes & skin R 41 Risk of serious damage to eyes S24/25 Avoid contact with skin and eyes S26/28 In case of contact eyes & skin, rinse with plenty water and seek medical advice Section 312/313: Not listed. Not listed under California proposition 65.

Regulation (EC) No. 1907/2006.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : FLAMMABLE LIQUIDS

Take note of Dir 94/33/EC on the protection of young people at work. For this product a chemical safety assessment was not carried out

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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