## 1. Product and Company Identifaction

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Product Name

RXSOL-60-6604-474

Product Type

DIMETHYLAMINE SOLUTION 40% FOR SYNTHESIS

Revised date

Company Details:

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

Stock Point: Mumbai, Kandla, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat Barka

Phone +91 22 27815541 / 42

Fax +91 22 2781 1318 :::AOH :0091 9821214367

Email <u>mail@rxmarine.com</u>

## 2. Composition / Information on ingredients

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2.1. Substances: DIMETHYLAMINE SOLUTION

CAS-No.: 124-40-3

Substance name Contents CAS No

Dimethylamine 40% 231-791-2

Water 60% 7732-18-5

Substance.

Contains no other components or impurities which will influence the classification of the

product.

## 3. Hazards Identification

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3.1. Classification of the substance or mixture

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

Flammable liquids, H225

Category 2

Acute toxicity (oral), H302

Category 4

Skin corrosion/irritation, H314

Category 1B

Full text of H statements: see section 16

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

F; R11

Xn; R20/22

C; R34

Adverse physicochemical, human health and environmental effects

No additional information available

3.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to

displayExtra classification(s) to display

Symbol(s): Highly flammable

Xn: Harmful

C: Corrosive

R Phrase(s): R11: Highly flammable.

R20/22: Harmful by inhalation and if swallowed.

R34: Cause burns.

S Phrase(s): S26: In the case of contact with eyes, rinse immediately with plenty of

water and seek medical advise.

S36/37/39: Wear suitable protective clothing and gloves & eye/face protecting.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the

label where possible).

Hazard pictograms

Signal word: Danger

Hazard statements: H225 - Highly flammable liquid and vapour.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

Precautionary statements: P210 - Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

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.

P310 - Immediately call a POISON CENTER/doctor

No additional information available

#### 4. First Aid Measures

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#### 4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for

breathing. Immediately call a POISON CENTER/doctor.

First-aid measures after skin contact: Rinse skin with water/shower. Take off

immediately all contaminated clothing. Immediately call a POISON CENTER/doctor.

First-aid measures after eye contact: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER/doctor. First-aid measures after

ingestion: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Do NOT

induce vomiting. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: Causes severe skin burns and eye damage.

Symptoms/effects after inhalation: Harmful if inhaled.

Symptoms/effects after ingestion: Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting Measures

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#### 5.1. Extinguishing media

Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon

dioxide (CO2).

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapour.

Explosion hazard: May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective

equipment.

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Remove ignition sources. Use special care to avoid static electric

charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required.

Emergency procedures: Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

No additional information available

# 7. Handling and Storage

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## 7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable. Precautions for safe handling: No open flames. No smoking. Use only non-sparking tools. Do not breathe dust/fume/gas/mist/vapours/spray. Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

- 7.2. Conditions for safe storage, including any incompatibilitie
- s Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Comply with applicable regulations.

Storage conditions: Keep in fireproof place. Keep container tightly closed.

Incompatible materials: Heat sources.

7.3. Specific end use(s)

No additional information available

## 8. Exposure controls and personal protection

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8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection: protective gloves

Eye protection: Chemical goggles or face shield

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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9.1. Information on basic physical and chemical properties

Physical state: Liquid

Molecular mass: 45.09 g/mol

pH: No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point: Highly alkaline

Freezing point: No data available

Boiling point : No data available

Flash point: 16 °C

Auto-ignition temperature: 401 °C

Decomposition temperature: No data available

Flammability (solid, gas): Flammable

Highly flammable liquid and vapour.

Vapour pressure: 1.17 hPa at 55 °C

Relative vapour density at 20 °C: No data available

Relative density: No data available

Density: 0.83 - 0.93

Solubility: Water: Soluble in water

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: 0.028 - 0.144 vol %

9.2. Other information

No additional information available

## 10. Stability and reactivity

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10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight. Overheating. High temperature.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

## 11. Toxicological information

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11.1. Information on toxicological effects

Acute toxicity: Oral: Harmful if swallowed.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Harmful if swallowed.

# 12. Ecological information

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12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

## 13. Disposal considerations

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#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Additional information: Handle empty containers with care because residual vapours are flammable.

## 14. Transport information

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

14.1. UN number

UN-No. (ADR): 1160

UN-No. (IMDG): 1160

UN-No. (IATA): 1160

UN-No. (ADN): 1160

UN-No. (RID): 1160

14.2. UN proper shipping name

Proper Shipping Name (ADR): DIMETHYLAMINE AQUEOUS SOLUTION

Proper Shipping Name (IMDG) : DIMETHYLAMINE, AQUEOUS SOLUTION

Proper Shipping Name (IATA): Dimethylamine, aqueous solution

Proper Shipping Name (ADN): DIMETHYLAMINE AQUEOUS SOLUTION

Proper Shipping Name (RID): DIMETHYLAMINE AQUEOUS SOLUTION

Transport document description (ADR): UN 1160 DIMETHYLAMINE AQUEOUS

SOLUTION, 3 (8), II, (D/E)

Transport document description (IMDG): UN 1160 DIMETHYLAMINE, AQUEOUS

SOLUTION, 3 (8), II

Transport document description (IATA): UN 1160 Dimethylamine, aqueous solution, 3

(8), II

Transport document description (ADN): UN 1160 DIMETHYLAMINE AQUEOUS

SOLUTION, 3 (8), II

Transport document description (RID): UN 1160 DIMETHYLAMINE AQUEOUS

SOLUTION, 3 (8), II

14.3. Transport hazard class(es)

ADR: Transport hazard class(es) (ADR): 3 (8)

Danger labels (ADR): 3,8

IMDG: Transport hazard class(es) (IMDG): 3 (8)

Danger labels (IMDG): 3, 8

IATA: Transport hazard class(es) (IATA): 3 (8)

Hazard labels (IATA): 3, 8

ADN: Transport hazard class(es) (ADN): 3 (8)

Danger labels (ADN): 3, 8

RID: Transport hazard class(es) (RID): 3 (8)

Danger labels (RID): 3, 8

14.4. Packing group

Packing group (ADR): II

Packing group (IMDG): II

Packing group (IATA): II

Packing group (ADN): II

Packing group (RID): II

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information: No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR): FC

Limited quantities (ADR): 11

Excepted quantities (ADR): E2

Packing instructions (ADR): P001, IBC02

Mixed packing provisions (ADR): MP19

Portable tank and bulk container instructions (ADR): T7

Portable tank and bulk container special provisions (ADR): TP1

Tank code (ADR): L4BH

Vehicle for tank carriage: FL Transport category (ADR): 2 Special provisions for carriage [2] Operation (ADR): S2, S20 Hazard identification number (Kemler No.): 338 Orange plates: Tunnel restriction code (ADR): D/E EAC code: 22WE APP code : A(fl) Transport by sea Limited quantities (IMDG): 1 L Excepted quantities (IMDG): E2 Packing instructions (IMDG): P001 IBC packing instructions (IMDG): IBC02 Tank instructions (IMDG): T7 Tank special provisions (IMDG): TP1 EmS-No. (Fire): F-E EmS-No. (Spillage): S-C Stowage category (IMDG): B MFAG-No: 132 Air transport PCA Excepted quantities (IATA): E2 PCA Limited quantities (IATA): Y340 PCA limited quantity max net quantity (IATA): 0.5L PCA packing instructions (IATA): 352 PCA max net quantity (IATA): 1L CAO packing instructions (IATA): 363 CAO max net quantity (IATA): 5L ERG code (IATA): 3C Inland waterway transport Classification code (ADN): FC

Limited quantities (ADN): 1 L

Excepted quantities (ADN): E2

Carriage permitted (ADN): T

Equipment required (ADN): PP, EP, EX, A

Ventilation (ADN): VE01

Number of blue cones/lights (ADN): 1

Rail transport Classification code (RID): FC

Limited quantities (RID): 1L

Excepted quantities (RID): E2

Packing instructions (RID): P001, IBC02

Mixed packing provisions (RID): MP19

Portable tank and bulk container

instructions (RID): T7

Portable tank and bulk container special provisions (RID): TP1

Tank codes for RID tanks (RID): L4BH

Transport category (RID): 2

Colis express (express parcels) (RID): CE7

Hazard identification number (RID): 338

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## 15. Regulatory information

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15.1. Safety, health and environmental regulations/legislation specific for the

substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

DIMETHYLAMINE SOLUTION is not on the REACH Candidate List

DIMETHYLAMINE SOLUTION is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Reference to AwSV: Water hazard class (WGK) 1, Slightly hazardous to water

(Classification according to

AwSV; ID No. 250) 12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV: Is not subject of the 12. BlmSchV (Hazardous

Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen: The substance is not listed

SZW-lijst van mutagene stoffen: The substance is not listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen [2] Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen [2]

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 I-1

Store unit: 1 liter

Classification remarks: F; 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

15.2. Chemical safety assessment

No additional information available

#### 16. Other information

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Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN  $\,$ 

PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification,

labelling and packaging of substances and mixtures, amending and repealing Directives

67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information: None.

In accordance with REACH Regulation (CE) № 1907/2006 and with CLP Regulation

(CE) Nº 1272/2008

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