Material Safety Data Sheet

DI METHYL AMINE SOLUTION 40% FOR SYNTHESIS (RXSOL-60-6604-474)

1. Product and Company Identifaction

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
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Email	mail@rxmarine.com

2. Composition / informationon ingredients

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

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
3.3. Other hazards
No additional information available

4. First Aid Measures

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

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. Accidental Release Measures

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

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

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

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

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

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

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

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

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) : 1l
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 – Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 338 Orange plates :
Tunnel restriction code (ADR) : D/E
EAC code : •2WE
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

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. BImSchV (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 – 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 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

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.
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