Material Safety Data Sheet

DI ETHYLAMINE LR 99.5 % (RXSOL-60-6604-447)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-447
Product Type	DIETHYLAMINE
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

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2. Composition / informationon ingredients

2.1. Substance: DIETHYLAMINE
CAS No : 109- 89- 7
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
Acute toxicity (dermal), H312
Category 4
Acute toxicity (inhal.), H332
Category 4
Skin corrosion/irritation, H314
Category 1 A
Full text of classification categories and H statements : see section 16
Classification according to Directive 67/548/EEC or 1999/45/EC
F; R11
Xn; R20/21/22
C; R35
Full text of R-phrases: see section 16
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
C: Corrosive
Xn: Harmful
R Phrase(s):R11: Highly flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R35: Cause severe burns.
S Phrase(s) :S3: Keep in a cool place.
S16: Keep away from source of ignition-No smoking.
S26: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

S29: Do not empty into drains.
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+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage
Precautionary statements:
P210 - Keep away from heat/sparks/open flames/hot surfaces. - 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 or doctor/physician
3.3. Other hazards
No additional information available3

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER or doctor/physician. Specific treatment is urgent (see ... on this label).
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Specific measures (see ... on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse.
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 or doctor/physician.
Specific treatment (see ... on this label).
First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see ... on this label).
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : Causes severe skin burns and eye damage.
Symptoms/injuries after inhalation : Corrosive to the respiratory tract.
Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/injuries after eye contact : Causes serious eye damage.
Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.
4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO_2).
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 naked lights. 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 : Ventilate area.
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 naked lights. No smoking. Use only non-sparking tools. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.
7.2. Conditions for safe storage, including any incompatibilities
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.
Packaging materials : Do not store in corrodable metal.
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 : Wear respiratory protection

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Odour threshold : No data available
pH : No data available Relative evaporation rate (butylacetate=1) : 16.9
Melting point : -50 °C Freezing point : No data available
Boiling point : 55 - 58
Flash point : -28 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Flammable
Highly flammable liquid and vapour
Vapour pressure : 195 mm Hg at 20°C
Relative vapour density at 20 °C : 2.5
Relative density : No data available
Density : 0.71 g/cm³
Solubility : Water: Miscible 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 : 0.018 - 0.101 vol %
9.2.Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
Thermal decomposition generates : Corrosive vapours.
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.
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
May release flammable gases. Thermal decomposition generates : Corrosive vapours.

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Oral: Harmful if swallowed.
Dermal: Harmful in contact with skin.
Inhalation: Harmful if inhaled.
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
Specific target organ toxicity (single exposure) : Not classified
Additional information : Corrosive to the respiratory tract
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Potential adverse human health effects and symptoms
: Harmful if swallowed. Harmful in contact with skin.

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 ...
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) : 1154
UN-No. (IMDG) : 1154
UN-No.(IATA) : 1154
UN-No.(ADN) : 1154
UN-No. (RID) : 1154

14.2. UN proper shipping name
Proper Shipping Name (ADR) : DIETHYLAMINE
Proper Shipping Name (IMDG) : DIETHYLAMINE
Proper Shipping Name (IATA) : DIETHYLAMINE
Proper Shipping Name (ADN) : DIETHYLAMINE
Proper Shipping Name (RID) : DIETHYLAMINE
Transport document description (ADR) : UN 1154 DIETHYLAMINE, 3 (8), II, (D/E)
Transport document description (IMDG) : UN 1154 DIETHYLAMINE, 3 (8), II (-39°C c.c.)
Transport document description (IATA) : UN 1154 DIETHYLAMINE, 3 (8), II
Transport document description (ADN) : UN 1154 DIETHYLAMINE, 3 (8), II
Transport document description (RID) : UN 1154 DIETHYLAMINE, 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
AND : 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) : 1L
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) : E
Stowage and handling (IMDG) : SW2
Flash point (IMDG) : -39°C c.c.
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) : 3CH
- 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
DIETHYLAMINE For Synthesis is not on the REACH Candidate List
DIETHYLAMINE For Synthesis is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 248)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Denmark
Classification remarks : 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
Pregnant/breastfeeding women working with the product must not be in direct contact with 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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