Material Safety Data Sheet

DI METHYLFORMAMIDE AR (RXSOL-60-6604-475)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-475
Product Type	DIMETHYLFORMAMIDE AR
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

Substance / Preparation : N,N Dimethylformamide
CAS No :68-12-2
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 EC 67/548 or EC 1999/45
Classification : R61
Xn; R20/21
Xi; R36
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Reproductive toxicity - Unborn Child - Category 1B - Danger (CLP : Repr. 1B) H360
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319
Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312
Acute toxicity, Inhalation - Category 4 - Warning (CLP : Acute Tox. 4) H332
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic

R Phrase(s) : R61 : May cause harm to the unborn child.
R20/21 : Harmful by inhalation and in contact with skin.
R36 : Irritating to eyes.
S Phrase(s) : S53 : Avoid exposure - obtain special instructions before use.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words : Danger
Hazard statements : H360D: May damage the unborn child.
H312 : Harmful in contact with skin.
H319 : Causes serious eye irritation.
H332 : Harmful if inhaled.
Precautionary statements
• General : P201: Obtain special instructions before use.

• Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection.
P271: Use only outdoors or in a well-ventilated area.
P261: Avoid breathing dust, fume, gas, mist, vapours, spray.
P264: Wash thoroughly after handling.
• Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P308+P313: If exposed or concerned : get medical advice.
P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P337+P313: If eye irritation persists: Get medical advice/attention.
• Storage : P405: Store locked up.
• Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Special labelling : Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)
3.3. Other hazards
Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

4. First Aid Measures

4.1. Description of first aid measures
Inhalation : Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. Wash with plenty of soap and water. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.
Eye contact : Get medical advice. If eye irritation persists : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms relating to use : May damage the unborn child.
Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes serious eye irritation. Danger of serious damage to health by prolonged exposure through inhalation.
4.3. Indication of any immediate medical attention and special treatment needed
General information : Never give anything by mouth to an unconscious person. If exposed or concerned : get medical advice.

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.
Surrounding fires : Use water spray or fog for cooling exposed containers.
5.2. Special hazards arising from the substance or mixture
Hazardous combustion products : Under fire conditions, hazardous fumes will be present.
5.3. Advice for fire-fighters
Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
For emergency responders : Equip cleanup crew with proper protection.
Ventilate area.
For non-emergency personnel : Evacuate unnecessary personnel.
6.2. Environmental precautions
Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.
6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

7. Handling and Storage

7.1. Precautions for safe handling
Handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.
Wash thoroughly after handling. Obtain special instructions before use.
Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.
7.2. Conditions for safe storage, including any incompatibilities
Storage : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.
7.3. Specific end use(s)
Specific end use(s) : None.

8. Exposure controls and personal protection

8.1. Exposure controls
Personal protection : Avoid all unnecessary exposure.
• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
• Hand protection : Wear protective gloves.
• Eye protection : Chemical goggles or safety glasses.
• Others : When using, do not eat, drink or smoke.
8.2. Control parameters
Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state at 20 °C : Liquid.
Odour threshold : No data available.
pH value : No data available.
Melting point [°C] : -61 °C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : 4450C
Flammability (solid, gas) : Flammable
. Flash point [°C] : 580C
Boiling point [°C] : 153 °C
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : 0.17
Vapour pressure [20°C] : 2.7 @ 20C
Vapour pressure mm/Hg : N/A
Vapour density : 2.52
Density [g/cm3] : 0.949
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Complete.
Solubility in water : N/A
Log Pow octanol / water at 20°C : No data available.
Solubility : 6.7
Viscosity at 40°C [mm2/s] : N/A
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : 15.20%
Explosion limits - lower [%] : 2.20%
Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Not established.
10.4. Conditions to avoid
Conditions to avoid : Direct sunlight. Extremely high or low temperatures.
10.5. Incompatible materials
Materials to avoid : Strong acids. Strong bases.
10.6. Hazardous decomposition products
Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity
• Inhalation : Harmful if inhaled.
• Dermal : Harmful in contact with skin.
• Ingestion : Based on available data, the classification criteria are not met.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Causes serious eye irritation.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Based on available data, the classification criteria are not met.
Toxic for reproduction : May damage the unborn child.
STOT-single exposure : Based on available data, the classification criteria are not met.
STOT-repeated exposure : Based on available data, the classification criteria are not met.
Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity
Toxicity information : Not established.
12.2. Persistence - degradability
Persistence - degradability : Biodegradable.
12.3. Bioaccumulative potential
Bioaccumulative potential : Not established.
12.4. Mobility in soil
Mobility in soil : Not established.
12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.
12.6. Other adverse effects
Environmental precautions : Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods
General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : N,N-DIMETHYLFORMAMIDE
UN N° : 2265
H.I. nr : 30
ADR - Class : 3 Labelling - Transport : 3 : Flammable liquid.
ADR - Classification code : F1
ADR - Group : III
ADR - Packing instructions : P001 R001 LP001
ADR - Limited Quantity : 5 L
ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]
Proper shipping name : N,N-DIMETHYLFORMAMIDE
UN N° : 2265
IMO-IMDG - Class or division : 3 : Flammable liquid.
IMO-IMDG - Packing group : III
IMO- IMDG - Packing instructions : P001 LP01
IMO-IMDG - Limited quantities : 5 L
IMO-IMDG - Marine pollution : No
EMS-Nr : F-E S-D
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : N,N-DIMETHYLFORMAMIDE
UN N° : 2265
IATA - Class or division : 3 : Flammable liquid.
IATA - Packing group : III
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 355
instruction
- Passenger and Cargo - Maximum : 60 L
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 366
- Cargo only - Maximum Quantity/ : 220 L
Packing
IATA - Limited Quantites : 10 L
ERG-Nr : 3L

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture
REACH Restrictions - Annex XVII : With the exception of those listed below:
The components of this product are not subject to restrictions.
Annex XVII
REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.
15.2. Chemical Safety Assessment
Chemical Safety Assessment : It has not been carried out.

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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