Material Safety Data Sheet

DI METHYL FORMAMIDE LR (RXSOL-60-6604-477)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-477
Product Type	DIMETHYLFORMAMIDE
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. Substance : 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 according to Regulation (EC) No. 1272/2008 [CLP]
Flammable liquids, H226
Category 3
Acute toxicity (dermal), H312
Category 4
Acute toxicity (inhal.), H332
Category 4
Serious eye damage/eye irritation, H319
Category 2
Reproductive toxicity, H360D
Category 1B
Classification according to Directive 67/548/EEC or 1999/45/EC
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) : T : Very toxic
Xi : Irritation.
Xn: Harmful
R Phrase(s) : R20/21: Harmful by inhalation and in contact with skin.
R61: May cause harm to unborn child.
R36: Irritating to eyes.
S Phrase(s) : S53: Avoid exposure – obtain special instruction before use.
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 : H226 - Flammable liquid and vapour
H312+H332 - Harmful in contact with skin or if inhaled

H319 - Causes serious eye irritation
H360D - May damage the unborn child
Precautionary statements : P201 - Obtain special instructions before use
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
P308+P313 - IF exposed or concerned: Get medical advice/attention
3.3. Other hazards
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact : 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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : May damage the unborn child.
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 irritation.
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 (CO_2).

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

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
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 : Clear up rapidly by scoop or vacuum.
6.4. Reference to other sections
No additional information available

7. Handling and Storage

7.1. Precautions for safe handling
Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions
have been read and understood.
Hygiene measures : Wash ... thoroughly after handling.
7.2. Conditions for safe storage, including any incompatibilities
Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.
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 safety glasses
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 : 6.7
Relative evaporation rate (butylacetate=1) : 0.17
Melting point : -61 °C
Freezing point : No data available
Boiling point : 153 °C
Flash point : 580 °C
Auto-ignition temperature : 4450 °C
Decomposition temperature : No data available
Flammability (solid, gas) : Flammable
Vapour pressure : 2.7 at 20C
Relative vapour density at 20 °C : 2.52
Relative density : No data available
Density : 0.949 g/cm³
Solubility : Water:
Complete Log Pow : 1.01
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 0.022 - 0.152 vol %
9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
No additional information available
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
Direct sunlight. Overheating. Open flame. Heat. Sparks.
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: Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.
Skin corrosion/irritation : Not classified
pH: 6.7
Serious eye damage/irritation : Causes serious eye irritation.
pH: 6.7
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : May damage the unborn child.
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Potential adverse human health effects and symptoms : 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
Log Pow 1.01
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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 ...

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 2265
UN-No. (IMDG) : 2265
UN-No.(IATA) : 2265
UN-No.(ADN) : 2265
UN-No. (RID) : 2265
14.2. UN proper shipping name
Proper Shipping Name (ADR) : DIMETHYLFORMAMIDE
Proper Shipping Name (IMDG) : DIMETHYLFORMAMIDE
Proper Shipping Name (IATA) : DIMETHYLFORMAMIDE
Proper Shipping Name (ADN) : DIMETHYLFORMAMIDE
Proper Shipping Name (RID) : DIMETHYLFORMAMIDE
Transport document description (ADR) : UN 2265 DIMETHYLFORMAMIDE, 3, III, (D/E)
Transport document description (IMDG) : UN 2265 DIMETHYLFORMAMIDE, 3, III (58°C c.c.)
Transport document description (IATA) : UN 2265 DIMETHYLFORMAMIDE, 3, III
Transport document description (ADN) : UN 2265 DIMETHYLFORMAMIDE, 3, III
Transport document description (RID) : UN 2265 DIMETHYLFORMAMIDE, 3, III
14.3. Transport hazard class(es)
ADR- Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3
IMDG- Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
IATA- Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3
ADN- Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3

RID- Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3
14.4. Packing group
Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III
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) : F1
Limited quantities (ADR) : 5L
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T2
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : LGBF Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage – Packages (ADR) : V12
Special provisions for carriage – Operation (ADR) : S2
Hazard identification number (Kemler No.) : 30
Orange plates :
Tunnel restriction code (ADR) : D/E
EAC code : •2Y
Transport by sea- Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP2
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : A
Flash point (IMDG) : 58°C c.c.
MFAG-No : 129
Air transport- PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
ERG code (IATA) : 3L
Inland waterway transport- Classification code (ADN) : F1
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0
Rail transport- Classification code (RID) : F1
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP2
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30
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
N,N-dimethylformamide is on the REACH Candidate List
DIMETHYLFORMAMIDE For Synthesis is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (KBwS-Beschluss; WGK No 83)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Denmark
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
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
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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