

1. Product and Company Identification

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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
Fax +91 22 2781 1318 :::AOH :0091 9821214367
Email mail@rxmarine.com

2. Composition / Information on ingredients

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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

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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

4.1. 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 (CO₂).

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

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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

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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

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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 safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

9. Physical and chemical properties

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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

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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

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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

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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

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13.1. Waste treatment methods

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

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

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

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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) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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