

1. Product and Company Identification

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Product Name RXSOL-60-6604-621
Product Type FURFURYL ALCOHOL 98% FOR SYNTHESIS
Revised date

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

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2. Composition / Information on ingredients

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Substance / Preparation : furfuryl alcohol

CAS No :98-00-0

Substance

Substance name Contents CAS No

furfuryl alcohol : 100 % 98-00-0

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 EC 67/548 or EC 1999/45

Classification : Carc. Cat. 3; R40

T; R23

Xn; R21/22-48/20

Xi; R36/37

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Carcinogenicity - Category 2 - Warning (CLP : Carc. 2) H351

Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -

Category 3 - Warning (CLP : STOT SE 3) H335

Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP :

STOT RE 2) H373

Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319

Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331

Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302

Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312

3.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : T : Toxic

R Phrase(s) : R21/22 : Harmful in contact with skin and if swallowed.

R23 : Toxic by inhalation.

R36/37 : Irritating to eyes and respiratory system.

R40 : Limited evidence of a carcinogenic effect.

R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation.

S Phrase(s) : S1/2 : Keep locked up and out of reach of children.

S36/37 : Wear suitable protective clothing and gloves.

S45 :In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

S63 : In case of accident by inhalation : remove casualty to fresh air and keep at rest.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms

Hazard statements : H331 : Toxic if inhaled.

H351 : Suspected of causing cancer.

H302 : Harmful if swallowed.

H312 : Harmful in contact with skin.

H319 : Causes serious eye irritation.

H335 : May cause respiratory irritation.

H373 : May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

☒ General : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

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.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

☒ Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell.

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.

P314: Get medical advice if you feel unwell.

P337+P313: If eye irritation persists: Get medical advice/attention.

☒ Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed.

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.

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 : Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). 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. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Wash with plenty of soap and water.

Wash contaminated clothing before reuse.

Eye contact : Get medical advice. If eye irritation persists : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes

Ingestion : Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Danger of serious damage to health by prolonged exposure through inhalation. Suspected of causing cancer. Causes damage to organ.

Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes serious eye irritation. May cause respiratory irritation.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting Measures

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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

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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. Store away from other materials. Collect spillage.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and Storage

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7.1. Precautions for safe handling

Handling : Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Wash thoroughly after handling.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

Special precautions : Avoid breathing dust, fume, gas, mist, vapours, spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.

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

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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

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9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Liquid.

Odour threshold : 8 ppm

pH value : No data available.

Melting point [°C] : -29 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 490°C

Flammability (solid, gas) : N/A

Flash point [°C] : 65°C

Boiling point [°C] : 170 °C

Initial boiling point [°C] : N/A

Final boiling point [°C] : N/A

Evaporation rate : N/A

Vapour pressure [20°C] : 0.1 kPa (@ 20°C)

Vapour pressure mm/Hg : N/A

Vapour density : 3,38

Density [g/cm³] : 1,1296

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Soluble

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A

Viscosity at 40°C [mm²/s] : N/A

9.2. Other information

Explosive properties : N/A

Explosion limits - upper [%] : 16,30%

Explosion limits - lower [%] : 1,80% O

oxidising properties : No data available

10. Stability and reactivity

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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

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11.1. Information on toxicological effects

Acute toxicity

☒ Inhalation : Toxic if inhaled.

☒ Dermal : Harmful in contact with skin.

☒ Ingestion : Harmful if swallowed.

Corrosion : Based on available data, the classification criteria are not met.

Irritation : Causes serious eye irritation. May cause respiratory irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Suspected of causing cancer.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

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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

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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.

Special precautions : Hazardous waste due to toxicity.

14. Transport information

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14.1. Land transport (ADR-RID)

Proper shipping name : FURFURYL ALCOHOL

UN N° : 2874

H.I. nr : 60

ADR - Class : 6.1

Labelling - Transport : 6.1 : Toxic substances.

ADR - Classification code : T1

ADR - Group : III

ADR - Packing instructions : P001 R001 LP001

ADR - Limited Quantity : 5 L

ADR - Tunnel code : E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name : FURFURYL ALCOHOL

UN N° : 2874

IMO-IMDG - Class or division : 6.1 : Toxic substances.

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-A S-A

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : FURFURYL ALCOHOL

UN N° : 2874

IATA - Class or division : 6.1 : Toxic substances.

IATA - Packing group : III

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 655

instruction -

Passenger and Cargo - Maximum : 60 L

Quantity/Packing

IATA - Cargo only : ALLOWED

- Cargo only - Packing instruction : 663

- Cargo only - Maximum Quantity/ : 220 L

Packing

IATA - Limited Quantities : 2 L

ERG-Nr : 6L

15. Regulatory information

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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 : The components of this product are not subject to restrictions.

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

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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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