Material Safety Data Sheet

FURFURYL ALCOHOL 98% FOR SYNTHESIS (RXSOL-60-6604-621)

1. Product and Company Identifaction

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

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 / informationon ingredients

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

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

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. Store away from other materials. Collect spillage.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

7. Handling and Storage

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

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 : 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
xidising 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 : 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

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.
Special precautions : Hazardous waste due to toxicity.

14. Transport information

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 Quantites : 2 L
ERG-Nr : 6L

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 : 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

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) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling,storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.