# Material Safety Data Sheet

**FURFURAL** (RXSOL-19-1194-025)

## 1. Product and Company Identifaction

| | |
|---|---|
| Product Name | RXSOL-19-1194-025 |
| Product Type | FURFURAL |

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

| Chemical Name | Cas No | EC No | Whight | Formula |
|---|---|---|---|---|
| FURFURAL | 98-01-1 | 202-627-7 | = 100 % | $C_5H_4O_2$ |

Substance / Preparation : 2-furaldehyde
CAS No :98-01-1
Substance.

| Substance name | Contents | CAS No |
|---|---|---|
| 2-furaldehyde : | 100 % | 98-01-1 |

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; R23/25
Xn; R21
Xi; R36/37/38
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
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301
Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312
Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic

R Phrase(s) : R21 : Harmful in contact with skin.
R23/25 : Toxic by inhalation and if swallowed.
R36/37/38 : Irritating to eyes, respiratory system and skin.
R40 : Limited evidence of a carcinogenic effect.
S Phrase(s) : S1 : Keep locked up.
S2 : Keep out of the reach of children.
S21 : . When using do not smoke.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 : Wear suitable protective clothing and gloves.
S40: To clean the floor and all objects contaminated by this material use …(to be specified by the manufacturer).

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 : H301 : Toxic if swallowed.
H331 : Toxic if inhaled.
H351 : Suspected of causing cancer.
H312 : Harmful in contact with skin.
H319 : Causes serious eye irritation.
H315 : Causes skin irritation.
H335 : May cause respiratory irritation.
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.
P261: Avoid breathing dust, fume, gas, mist, vapours, spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
• Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P308+P313: If exposed or concerned : get medical advice.
P332+P313: If skin irritation occurs : 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.
• 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.
Skin contact : Specific treatment (see on this label). Wash with plenty of soap and water.
Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. If skin irritation occurs : Get medical advice.
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 : Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Do NOT induce vomiting. Rinse mouth.
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.
Swallowing a small quantity of this material will result in serious health hazard.
Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.
Repeated exposure to this material can result in absorption through skin causing significant 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 : Wash thoroughly after handling. Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Wash thoroughly after handling. Do not eat, drink or smoke when using
this product. 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.
• Skin protection : Wear suitable protective clothing.
• 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] : -36 °C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : 3160C
Flammability (solid, gas) : N/A
Flash point [°C] : 60 °C
Boiling point [°C] : 162 °C
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : N/A
Vapour pressure [20°C] : 2.3 hPa at 20 °C
Vapour pressure mm/Hg : N/A
Vapour density : 3,32
Density [g/cm3] : 1,16
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 [%] : 19,30%
Explosion limits - lower [%] : 2,10%
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 : Toxic if inhaled.
• Dermal : Harmful in contact with skin.
• Ingestion : Toxic if swallowed.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Causes serious eye irritation. Causes skin 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 : 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.
Special precautions : Hazardous waste due to toxicity.

## 14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : FURALDEHYDES
UN N° : 1199
H.I. nr : 63
ADR - Class : 6.1 Labelling - Transport : 6.1 : Toxic substances. 3 : Flammable liquid.
ADR - Classification code : TF1

ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 100 ML
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 : FURALDEHYDES
UN N° : 1199
IMO-IMDG - Class or division : 6.1 : Toxic substances. ( 3 : Flammable liquid. )
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 100 ml
IMO-IMDG - Marine pollution : No
EMS-Nr : F-E S-D
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : FURALDEHYDES
UN N° : 1199
IATA - Class or division : 6.1 : Toxic substances. ( 3 : Flammable liquid. )
IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 654
instruction
- Passenger and Cargo - Maximum : 5 L
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 662
- Cargo only - Maximum Quantity/ : 60 L
Packing
IATA - Limited Quantites : 1 L
ERG-Nr : 6F

## 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

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