Material Safety Data Sheet

GLUTARALDEHYDE FOR SYNTHESIS (RXSOL-60-6604-638)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-638
Product Type	GLUTARALDEHYDE 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

2.1. Substances

Substance name	Contents	CAS No
Water	50% – 75%	7732-18-5
Glutaraldehyde	25% – 50 %	111-30-8
Methanol	5% - 10%	67-56-1

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]Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)
Acute toxicity (oral), H302
Category 4: Acute toxicity (inhalation:gas), H332
Category 4: Skin corrosion/irritation, H314
Category 1B: Respiratory sensitisation, H334
Category 1: Skin sensitisation, H317
Category 1: Specific target organ toxicity — single exposure, H370
Category 1: Hazardous to the aquatic environment — Acute Hazard, H400
Category 1: 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
N : Dangerous for the environment

R Phrase(s) : R23/25: Toxic by inhalation and if swallowed.
R34: Cause burns.
R42/43: May cause sensitisation by inhalation and skin contact.
R51: Toxic to aquatic organisms.
S Phrase(s) : S26: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61: avoid release to the environment . refer to special instruction/safety data sheets.
S36/37/39 : Wear suitable protective clothing and gloves & eye/face protecting.

Hazard Pictograms
Signal word : Danger
Hazard statements : H302+H332 - Harmful if swallowed or if inhaled
H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H370 - Causes damage to organs.
H400 - Very toxic to aquatic life.
Precautionary statements : P260 - Do not breathe dust, fume, gas, vapours, spray, mist.
P273 - Avoid release to the environment.
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.
P310 - Immediately call a POISON CENTER/doctor
3.3. Other hazards : No additional information available

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. First-aid measures after skin contact : Take off immediately all contaminated clothing.
Rinse skin with water/shower.
Immediately call a POISON CENTER/doctor. Wash with plenty of water/….Get medical advice/attention. 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. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately
call a POISON CENTER/doctor.
4.2. Most important symptoms and effects, both acute and delayed Symptoms/effects : Causes severe skin burns and eye damage. Suspected of causing
genetic defects.
Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Symptoms/effects after ingestion : 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 : Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.
5.2. Special hazards arising from the substance or mixture: No additional information available
5.3. Advice for firefighters: Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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 : Ventilate area.
6.2. Environmental precautions: Avoid release to the environment.
6.3. Methods and material for containment and cleaning up Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
6.4. Reference to other sections: No additional information available

7. Handling and Storage

7.1. Precautions for safe handling
Precautions for safe handling : Avoid breathing dust, fume, gas, vapours, spray, mist. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace.
7.2. Conditions for safe storage, including any incompatibilities
Technical measures : Comply with applicable regulations.
Storage conditions : Keep container tightly closed. Store in original container. 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 face shield
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of inadequate ventilation wear respiratory protection.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Odour threshold : No data available
pH : 3.1 - 4.5
Relative evaporation rate (butylacetate=1) : No data available
Melting point : -10 °C
Freezing point : No data available
Boiling point : 101 °C
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : 0.0203 hPa at 20 °C
Relative vapour density at 20 °C : 0.8
Relative density : No data available
Density : 1.06 g/cm³
Solubility : Water: Soluble in water
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available
9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity: Thermal decomposition generates : Corrosive vapours.
10.2. Chemical stability: Stable under normal conditions.
10.3. Possibility of hazardous reactions: No additional information available
10.4. Conditions to avoid: Air contact. Direct sunlight. Moisture.
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 : Oral: Harmful if swallowed.
Inhalation:gas: Harmful if inhaled.
ATE CLP (oral) 500 mg/kg bodyweight
ATE CLP (gases) 4500 ppmv/4h
Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 3.1 - 4.5
Serious eye damage/irritation : Serious eye damage, category 1, implicit
pH: 3.1 - 4.5
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Potential adverse human health effects and symptoms : Harmful if swallowed.

12. Ecological information

12.1. Toxicity: No additional information available
12.2. Persistence and degradability: No additional information available
12.3. Bioaccumulative potential: No additional information available
12.4. Mobility in soil: No additional information available
12.5. Results of PBT and vPvB assessment: No additional information available
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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 3082
UN-No. (IMDG) : 3082
UN-No. (IATA) : 3082
UN-No. (ADN) : 3082
UN-No. (RID) : 3082
14.2. UN proper shipping name
Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT
Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III
Transport document description (ADN) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
Transport document description (RID) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
14.3. Transport hazard class(es)
ADR- Transport hazard class(es) (ADR) : 9
Danger labels (ADR) : 9
IMDG- Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9
IATA- Transport hazard class(es) (IATA) : 9
Hazard labels (IATA) : 9
ADN- Transport hazard class(es) (ADN) : 9
Danger labels (ADN) : 9
RID- Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9
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 : Yes
Marine pollutant : Yes
Other information : No supplementary information available
14.6. Special precautions for user
Overland transport- Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage – Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :
Tunnel restriction code (ADR) : -
EAC code : •3Z
Transport by sea- Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A
MFAG-No : 171
Air transport- PCA
Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197
ERG code (IATA) : 9L
Inland waterway transport- Classification code (ADN) : M6
Special provisions (ADN) : 274, 335, 375, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0
Rail transport- Classification code (RID) : M6
Special provisions (RID) : 274, 335, 375, 601
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1, TP29
Tank codes for RID tanks (RID) : LGBV
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW31
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90
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
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
15.1.2. National regulations
Germany
Reference to AwSV : Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen –
Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de
voortplanting giftige stoffen – Ontwikkeling : None of the components are listed
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
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.
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.