Material Safety Data Sheet

TETRAMETHYL AMMONIUM HYDROXIDE SOLUTION 25% IN METHANOL (RXSOL-60-6605-697)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-697
Product Type	TETRAMETHYL AMMONIUM HYDROXIDE SOLUTION 25% IN METHANOL
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

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2. Composition / informationon ingredients

Substance / Preparation : Preparation.
Hazardous component(s) : This product is hazardous.

Substance name	Contents	CAS No
TETRAMETHYL AMMONIUM HYDROXIDE 25% IN METHANOL :	> 15 25 %	75-59-2
Methanol :	> 75 99 %	67-56-1

3. Hazards Identification

3.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45
Classification : T; R23/24/25-R39/23/24/25
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Specific Target Organ Toxicity - Single exposure - Category 1 - Danger (CLP : STOT SE 1) H370
Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic
R Phrase(s) : R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 : Toxic : danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
S Phrase(s) : S4 : Keep away from living quarters.
S24 : Avoid contact with skin.
S28 : After contact with skin, wash immediately with
S35 : This material and its container must be disposed of in a safe way.
S36/37 : Wear suitable protective clothing and gloves.
S38 : In case of insufficient ventilation, wear suitable respiratory equipment.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
S59 : Refer to manufacturer/supplier for information on recovery/recycling.
Contains : Methanol - TETRAMETHYL AMMONIUM HYDROXIDE 25% IN METHANOL
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms
Signal words : Danger
Hazard statements : H301 : Toxic if swallowed.
H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.
H370 : Causes damage to organ.
Precautionary statements
• 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 : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
P307+P311: IF EXPOSED : Call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P361: Remove immediately all contaminated clothing.
• 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.
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.
Contains : Methanol - TETRAMETHYL AMMONIUM HYDROXIDE 25% IN METHANOL
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 : Remove to fresh air and keep at rest in a position comfortable for breathing. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.
Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
Eye contact : Obtain medical attention if pain, blinking or redness persist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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 : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes damage to organ. Danger of serious damage to health by prolonged exposure through inhalation.
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). Call a POISON CENTER or doctor. Specific treatment (see on this label).

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. Avoid breathing dust, fume, gas, mist, vapours, spray.
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. Collect spillage. Store away from other materials.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

7. Handling and Storage

7.1. Precautions for safe handling
Handling : Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. 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.
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 ;
Personal protection : Avoid all unnecessary exposure.
• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
• 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.
Occupational Exposure Limits : Methanol : OEL (UK)-LTEL [ppm] : 200
Methanol : OEL (UK)-STEL [ppm] : 250
Methanol : ILV (EU) - 8 H - [mg/m³] : (260 Skin.)
Methanol : ILV (EU) - 8 H - [ppm] : (200 Skin.)
Methanol : HTP-värden - 8 H - [ppm] : 200
Methanol : HTP-värden - 15min - [ppm] : 250
Methanol : HTP-värden - 8 H - [mg/m³] : 270
Methanol : HTP-värden - 15min - [mg/m³] : 330
Methanol : NGV - [ppm] : 200
Methanol : NGV - [mg/m³] : 250
Methanol : KTV - [ppm] : 250
Methanol : KTV - [mg/m³] : 350
Methanol : VLA-ED [ppm] : 200
Methanol : VLA-ED [mg/m³] : 266
Methanol : VLA-EC [ppm] : 250
Methanol : VLA-EC [mg/m³] : 333

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] : -97.8°C

Decomposition point [°C] : N/A
Critical temperature [°C] : No data available.
Auto-ignition temperature [°C] : No data available.
Flammability (solid, gas) : Flammable.
Flash point [°C] : No data available.
Boiling point [°C] : 63.9 °C
Initial boiling point [°C] : No data available.
Final boiling point [°C] : No data available.
Evaporation rate : 5,2
Vapour pressure [20°C] : No data available.
Vapour pressure mm/Hg : 29 mm Hg (@ 20°C)
Vapour density : 1,1
Density [g/cm3] : 0,8
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : In water, material soluble.
Solubility in water : No data available.
Log Pow octanol / water at 20°C : No data available.
Solubility : N/A
Viscosity at 40°C [mm2/s] : No data available.
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : No data available.
Explosion limits - lower [%] : No data available.
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
Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.
Acute toxicity
Inhalation : Toxic if inhaled.
• Dermal : Toxic in contact with skin.
• Ingestion : Toxic if swallowed.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Based on available data, the classification criteria are not met.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Based on available data, the classification criteria are not met.
Toxic for reproduction : Based on available data, the classification criteria are not met.
STOT-single exposure : Causes damage to organ.
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.
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12. Ecological information

12.1. Toxicity
Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.
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 : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
UN N° : 3286
H.I. nr : 368
ADR - Class : 3
Labelling - Transport : 3 : Flammable liquid. 6.1 : Toxic substances. 8 : Corrosive substance.
ADR - Classification code : FTC
ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 0
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 : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
UN N° : 3286
IMO-IMDG - Class or division : 3 : Flammable liquid. (6.1 : Toxic substances.) (8 : Corrosive substance.)
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 1 L
IMO-IMDG - Marine pollution : Yes
EMS-Nr : F-E S-C
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
UN N° : 3286
IATA - Class or division : 3 : Flammable liquid. (6.1 : Toxic substances.) (8 : Corrosive substance.)
IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing instruction : 352
- Passenger and Cargo - Maximum Quantity/Packing : 1 L
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 363
- Cargo only - Maximum Quantity/ Packing : 5 L
IATA - Limited Quantites : 0.5 L
ERG-Nr : 3CP

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.
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.
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