Material Safety Data Sheet

TETRA BUTYL AMMONIUM HYDROXIDE 0.1 NORMAL IN IPA (RXSOL-60-6605-665)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-665
Product Type	TETRA BUTYL AMMONIUM HYDROXIDE 0.1 NORMAL IN IPA
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
TETRABUTYL AMMONIUM:	> 5 10 %	-----
HYDROXIDEMethanol:	> 50 75 %	67-56-1
Propan-	2-ol:> 25 50 %	67-63-0

3. Hazards Identification

3.1. Classification of the substance or mixture
Classificatio n EC 67/548 or EC 1999/45
Classification : T; R23/24/25 Xi; R36R39/23/24/25
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008
(CLP) Health hazards : Specific Target Organ Toxicity Danger (CLP : STOT SE 1) H37
Acute toxicity, Inhalation0 Category 3-- Single exposureCategory
1 Danger (CLP : Acute Tox. 3) H331
Eye irritationCategory 2A Acute toxicity, dermal-- Warning (CLP : Eye Irrit. 2) H319
Category 3 Acute toxicity, OralCategory 3-- Danger (CLP : Acute Tox. 3) H311 Danger
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic R Phrase(s) (CLP : Acute Tox. 3)
H301: R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.
R36 : Irritating to eyes. 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.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seekmedical advice.
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-Propan-2-ol-TETRABUTYLAMMONIUM HYDROXIDE AR
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.
H319 : Causes serious eye irritation.
H370: Causes damage to organ.Precautionary statements
• Prevention: P280: Wear protective gloves, protective clothing, eye protection, faceprotection.
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 ordoctor.
P307+P311: IF EXPOSED : Call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
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 positioncomfortable for breathing.
P363: Wash contaminated clothing before reuse.
P337+P313: If eye irritation persists: Get medical advice/attention.
P361: Remove immediately all contaminated clothing.
• Storage: P403+P233: Store in well-ventilatedplace. Keep container tightly closed.
P405: Store locked up.
• Disposal considerations: P501: Dispose of this material and its container to hazardousor
special wastecollection point, in accordance with local, regional, national and/orinternationalregulation.
P501: Dispose of this material and its container to hazardous or special wastecollection point, in accordance with local, regional, national and/or internationalregulation.
3.3. Other hazards
Other hazards: The substance does not fulfil the criteria to be identified as PBT
substance or vPvBsubstance according to Annex XIII of Regulation REACH.

4. First Aid Measures

4.1. Description of first aid measures
Inhalation: Specific treatment (see on this label). Immediately call a POISON CENTERordoctor.
Remove to fresh air and keep at rest in a position comfortable for breathing.
Skin contact: Remove affected clothing and wash all exposed skin area with mild soapandwater,
followed by warm water rinse. Wash contaminated clothing before reuse.
Remove/Take off immediately all contaminated clothing. Wash with plenty of soapand water.
Immediately call a POISON CENTER or doctor. Specific treatment (seeonthis label).
Eye contact: Rinse cautiously with water for several minutes.
Remove contactlenses, ifpresentand easy to do. Continue rinsing. Get medical advice
. If eye irritation persists :Ingestion: Immediately call a POISON CENTER or doctor.
Specific treatment (see onthislabel). Do NOT induce vomiting. Rinse mouth.
4.2. Most importantsymptoms and effects, both acute and delayed
Symptoms relating to use: Repeated exposure to this material can result in absorptionthrough
skin causingsignificant health hazard.Causes damage to organ.Danger ofserious damage to health
by prolonged exposure through inhalation.Causes serious eyeirritation.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 youfeel unwell, seekmedical advice (show the label where possible)
. Call a POISONCENTER 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 ormixture
Hazardous combustion products: Under fire conditions, hazardous fumes will bepresent.
5.3. Advice for fire-fighters
Protection against fire: Do not enter fire area without proper protective equipment
,including respiratoryprotection.
Special procedures: Exercise caution when fighting any chemical fire.
Avoid (reject)fire-fighting water toenter environment.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
For emergency responders: Equipcleanup 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.
Notifyauthorities if product enterssewers 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
earthas soon aspossible. 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.
Avoid breathing dust, fume,gas,mist, vapours, spray.
Do not breathe dust, fume, gas, mist, vapours, spray.
Washthoroughly after handling. Do not eat, drink or smoke when using this product.
Technical protective measures: Provide good ventilation in process areato preventformation of vapour.
7.2. Conditions for safe storage, including any incompatibilities
Storage: Keep only in the original container in a cool, well ventilated place.
Keepcontainertightly 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 protectionPersonal protection: Avoid all unnecessary exposure.
• Respiratory protection: In case of insufficient ventilation, wear suitable respiratoryequipment.
Where exposure through inhalation may occur from use, respiratoryprotectionequipment 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] : 200Methanol : 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] : 200Methanol :
HTP-värden-15min-[ppm] : 250Methanol : HTP-värden-8 H-[mg/m³] : 270Methanol :
HTP-värden-15min-[mg/m³] : 330Methanol : NGV-[ppm] : 200Methanol : NGV-[mg/m³] : 250Methanol :
KTV-[ppm] : 250Methanol : KTV-[mg/m³] : 350Methanol : VLA-ED [ppm] : 200Methanol : VLA-ED [mg/m³] : 2
66Methanol : VLA-EC [ppm] : 250Methanol : 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]: No data available.
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]: N/A
Initial boiling point [°C]: No data available.
Final boiling point [°C]: No data available.
Evaporation rate: N/A
Vapour pressure [20°C]: No data available.
Vapour pressure mm/Hg: N/A
Vapour density: N/A
Density [g/cm3]: 1Relative density, gas (air=1): N/A
Relative density, liquid(water=1): N/A
Solubility in water [% weight]: N/A
Solubility in water: No data available.
Log Pow octanol / water at 20°C: No data available.
Solubility: 11,5Viscosity 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 effectsToxicity
information: The product has been not fully tested.
The calculated risk hasbeen done under therequirements 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: Causes serious eye irritation.
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.

12. Ecological information

12.1. Toxicity
Toxicity information: The product hasbeen not fully tested.
The calculated risk hasbeen done under therequirements 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 beidentified as PBT substance or vPvBsubstance according to
Annex XIII of RegulationREACH.
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 accordancewithlocal/national regulations.
Dispose of this material and its container to hazardous orspecial waste
collectionpoint, in accordance with local, regional, national and/orinternational
regulation.Special precautions: Hazardous waste due to toxicity.

14. Transport information

14.1. Land transport (ADR-RID)Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S.
UN N°: 1992
H.I. nr: 336

ADR-Class: 3
Labelling-Transport: 3 : Flammable liquid. 6.1 : Toxic substances.
ADR-Classification code: FT1
ADR-Group: II
ADR-Packing instructions: P001
ADR-Tunnel code: D/E : Bulk or tank carriage: Passage forbidden through tunnels ofcategory D andE.
Other carriage: Passage forbidden through tunnels of category E.
14.2. Sea transport (IMDG) [English only]
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S.
UN N°: 1992
IMO-IMDG-Class or division: 3 : Flammable liquid. (6.1 : Toxic substances.)
IMO-IMDG-Packing group: II
IMO-IMDG-Packing instructions: P001
IMO-IMDG-Limited quantities: 1 L
IMO-IMDG-Marine pollution: YesEMS-Nr: F-E S-D
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S.
UN N°: 1992
IATA-Class or division: 3 : Flammable liquid. (6.1 : Toxic substances.)
IATA-Packing group: II
IATA-Passenger and Cargo Aircraft: ALLOWED-
Passenger and Cargo-Packing: 352
instruction-Passenger and Cargo-Maximum: 1 L
Quantity/Packing
IATA-Cargo only: ALLOWED-
Cargo only-Packing instruction: 364-
Cargo only-Maximum Quantity/: 60 L
PackingIATA-Limited Quantites: 1 L
ERG-Nr: 3HP

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for thesubstance or mixture
Safety, health and environmental: Ensure all national/local regulations are observed.
regulations/legislationspecific for thesubstance or mixture
REACH Restrictions-Annex XVII: The components of this product are not subject torestrictions
.REACH Authorisation-Annex XIV: The components of this product are not subjectto 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
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