Material Safety Data Sheet

HYDRAZINE HYDRATE 80% AR (RXSOL-60-6604-682)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-682
Product Type	HYDRAZINE HYDRATE 80% AR
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
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2. Composition / informationon ingredients

Substance / Preparation : HYDRAZINE HYDRATE 80%
CAS No :7803-57-8
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 EC 67/548 or EC 1999/45
Classification : R10 T; R23/24/25 C; R34 R43 N; R50-53
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314
Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1) H317
Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311
Physical hazards : Flammable liquids - Category 3 - Warning (CLP : Flam. Liq. 3) H226
Environmental hazards : Hazardous to the aquatic environment - Acute hazard -
Category 1 - Warning (CLP : Aquatic Acute 1) H400
Hazardous to the aquatic environment - Chronic hazard - Category 1 -
Warning (CLP : Aquatic Chronic 1) H410
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic N : Dangerous for the environment
R Phrase(s) : R45 : May cause cancer. R10 : Flammable.
R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.
R34 : Causes burns. R43 : May cause sensitization by skin contact.
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse
effects in the aquatic environment. S Phrase(s) : S53 : Avoid exposure -
obtain special instructions before use. S45 : In case of accident or if you feel unwell,
seek medical advice immediately (show the label when possible).
S60 : This material and its container must be disposed of as hazardous waste.
S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words : Danger Hazard statements : H226 : Flammable liquid and vapour.
H314 : Causes severe skin burns and eye damage. H301 : Toxic if swallowed.
H311 : Toxic in contact with skin. H331 : Toxic if inhaled. H317 : May cause an allergic skin reaction.
H410 : Very toxic to aquatic life with long lasting effects. Precautionary statements
• Prevention : P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating, lighting, …, equipment.

P210: Keep away from heat, sparks, open flames or hot surfaces. – No smoking.
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.
P273: Avoid release to the environment.
P233: Keep container tightly closed.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.
• Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.
P391: Collect spillage. 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.
P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313: If skin irritation or rash occurs : Get medical advice.
P363: Wash contaminated clothing before reuse.
P361: Remove immediately all contaminated clothing.
P370+P378: In case of fire: Use for extinction.
• Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed.
P403+P235: Store in well-ventilated place. Keep cool. 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.
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 : Specific treatment (see on this label).
Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at
rest in a position comfortable for breathing. Skin contact : Wash contaminated
clothing before reuse. If skin irritation or rash occurs : Get medical advice.
Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.
Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.
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 or doctor.
Ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or
doctor. Specific treatment (see on this label).
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 severe skin burns and eye
damage. Danger of serious damage to health by prolonged exposure through inhalation. May
cause an allergic skin reaction. 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.
Thermal decomposition generates : Corrosive vapours.
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.

Technical measures : Use special care to avoid static electric charges.
Special precautions : Remove ignition sources.
No naked lights. No smoking.
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. Avoid release to the environment.
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 : Handle empty containers with care because residual vapours are flammable.
Take precautionary measures against static discharge. Contaminated work clothing should
not be allowed out of the workplace. Use only outdoors or in a wellventilated area. Do not breathe
dust, fume, gas, mist, vapours, spray. Wash contaminated clothing before reuse. 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. Proper grounding
procedures to avoid static electricity should be followed. Use only non-sparking tools. Use explosion-proof
electrical, ventilating, lighting, …, equipment. Special precautions : No naked lights. No smoking.
7.2. Conditions for safe storage, including any incompatibilities
Storage : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place.
Keep container tightly closed. Ground/bond container and receiving equipment.
Storage regulation : Comply with applicable regulations. Storage - away from : Strong bases.
Strong acids. Sources of ignition. Direct sunlight. Heat sources.
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 face shield.
• 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] : -570C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : 310 °C
Flammability (solid, gas) : Flammable
liquid and vapour. N/A
Flash point [°C] : 96 °C
Boiling point [°C] : 1170C
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : N/A
Vapour pressure [20°C] : N/A
Vapour pressure mm/Hg : N/A
Vapour density : 1,1
Density [g/cm3] : 1,028
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Miscible with water
Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.
Solubility : N/A
Viscosity at 40°C [mm2/s] : 0.90 cps
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : 99,99%
Explosion limits - lower [%] : 3,50%
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.
Open flame. Overheating. Heat. Sparks.
10.5. Incompatible materials
Materials to avoid : Strong acids. Strong bases.
10.6. Hazardous decomposition products
Hazardous decomposition products : Fumes.
Carbon monoxide. Carbon dioxide. Thermal
decomposition generates : Corrosive vapours.
May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects Acute toxicity
• Inhalation : Toxic if inhaled.
• Dermal : Toxic in contact with skin.
• Ingestion : Toxic if swallowed.
Corrosion : Causes severe skin burns and eye damage.
Irritation : Based on available data, the classification criteria are not met.
Sensitization : May cause an allergic skin reaction.
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 : 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 : Very toxic to aquatic life with long lasting effects.
12.2. Persistence - degradability
Persistence - degradability : May cause long-term adverse effects in the environment.
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. Handle empty
containers with care because residual vapours are flammable

14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : HYDRAZINE HYDRATE or HYDRAZINE,
AQUEOUS SOLUTION with not less than 37%
hydrazine, by mass
UN N° : 2030
H.I. nr : 86
ADR - Class : 8
Labelling - Transport : 8 : Corrosive substance. 6.1 : Toxic substances.
{ LÉ ADR - Classification code : CT1
ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 1 L
ADR - Tunnel code : E : Passage forbidden through tunnels of category E.
14.2. Sea transport (IMDG) [English only]
Proper shipping name : HYDRAZINE HYDRATE or HYDRAZINE,
AQUEOUS SOLUTION with not less than 37% hydrazine, by mass
UN N° : 2030
IMO-IMDG - Class or division : 8 : Corrosive substance. (6.1 : Toxic substances.)
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 1 L
IMO-IMDG - Marine pollution : Yes
EMS-Nr : F-A
S-B
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : HYDRAZINE HYDRATE or HYDRAZINE, AQUEOUS SOLUTION
with not less than 37% hydrazine, by mass
UN N° : 2030
IATA - Class or division : 8 : Corrosive substance. (6.1 : Toxic substances.)
IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : NOT ALLOWED IATA -
Cargo only : ALLOWED -
Cargo only - Packing instruction : 855 -
Cargo only - Maximum Quantity/ : 30 L
Packing ERG-Nr : 8P

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
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