Material Safety Data Sheet

HEXAMINE LR HEXA METHYLENE TETRAMINE (RXSOL-60-6604-673)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-673
Product Type	HEXAMINE LR (HEXAMETHYLENE TETRAMINE)
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

Substance / Preparation : methenamine; hexamethylenetetramine
CAS No :100-97-0
Substance.

Substance name	Contents	CAS No
methenamine; : hexamethylenetetramine	100 %	100-97-0 R43

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 : F; R11 R43 Hazard Class and Category Code(s), Regulation (EC)
No 1272/2008 (CLP) Health hazards : Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1)
H317 Physical hazards : Flammable solids - Category 1 - Danger (CLP : Flam. Sol. 1) H228
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : F : Highly flammable
Xn : Harmful
R Phrase(s) : R11 : Highly flammable.
R42 : May cause sensitization by inhalation.
R43 : May cause sensitization by skin contact.
S Phrase(s) : S2 : Keep out of the reach of children.
S16 : Keep away from source of ignition-No smoking.
S22 : Do not breath dust.
S24 : Avoid contact with skin.
S37 : Wear suitable gloves.
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words : Danger
Hazard statements : H228 : Flammable solid.
H317 : May cause an allergic skin reaction. 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.
• 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.
P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

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.
P333+P313: If skin irritation or rash occurs : Get medical advice.
P363: Wash contaminated clothing before reuse.
P370+P378: In case of fire: Use for extinction.
• 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 : Assure fresh air breathing. Allow the victim to rest.
Skin contact : Remove affected clothing and wash all exposed
skin area with mild soap and water, followed by warm water rinse.
Get medical advice. Specific treatment (see on this label).
If skin irritation or rash occurs : Wash with plenty of soap and water.
Wash contaminated clothing before reuse. Eye contact : Rinse immediately with plenty of water.
Obtain medical attention if pain, blinking or redness persist.
Ingestion : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms relating to use : May cause an allergic skin reaction.
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
Flammable class : Flammable solid.
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. 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.
6.3. Methods and material for containment and cleaning up
Clean up methods : On land, sweep or shovel into suitable containers.
Minimize generation of dust. 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 : Wash hands and other exposed areas with mild soap
and water before eat, drink or smoke and when leaving work.
Handle empty containers with care because residual vapours are flammable.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before reuse. Avoid breathing dust, fume, gas, mist, vapours, spray.
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 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 container closed when not in use. Keep in fireproof place. Ground/bond container and receiving equipment. 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 : Wear approved mask.
• 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.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state at 20 °C : Solid.
Odour threshold : No data available.
pH value : Not applicable.
Melting point [°C] : 280 °C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : 410 °C
Flammability (solid, gas) : Flammable solid. N/A
Flash point [°C] : 250 °C
Boiling point [°C] : N/A
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : N/A
Vapour pressure [20°C] : 0.01
hPa at 20 °C
Vapour pressure mm/Hg : N/A
Vapour density : 4,9
Density [g/cm3] : 1,33
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Soluble in 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] : N/A
9.2. Other information
Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A
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. May release flammable gases.

11. Toxicological information

11.1. Information on toxicological effects Acute toxicity
• Inhalation : Based on available data, the classification criteria are not met.
• Dermal : Based on available data, the classification criteria are not met.
• Ingestion : Based on available data, the classification criteria are not met.
Corrosion : Based on available data, the classification criteria are not met.
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 : 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 : Handle empty containers with care because residual vapours are flammable.

14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : HEXAMÉTHYLNE-TÉTRAMINE
UN N° : 1328
H.I. nr : 40
ADR - Class : 4.1
Labelling - Transport : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.
ADR - Classification code : F1
ADR - Group : III
ADR - Packing instructions : P002 R001
ADR - Limited Quantity : 5 KG
ADR - Tunnel code : E : Passage forbidden through tunnels of category E.
14.2. Sea transport (IMDG) [English only]
Proper shipping name : HEXAMÉTHYLNE-TÉTRAMINE
UN N° : 1328
IMO-IMDG - Class or division : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.
IMO-IMDG - Packing group : III
IMO- IMDG - Packing instructions : P002
IMO-IMDG - Limited quantities : 5 kg
IMO-IMDG - Marine pollution : No

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 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.