

## 1. Product and Company Identification

www.rxmarine.com

Product Name RXSOL-60-6604-094  
Product Type BROMINE LR  
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](mailto:mail@rxmarine.com)

## 2. Composition / Information on ingredients

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Substance / Preparation : Bromine

CAS No :7726-95-6

Substance.

Contains no other components or impurities which will influence the classification of the product.

## 3. Hazards Identification

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### 3.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : T+; R26

C; R35

N; R50

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Serious eye damage - Category 1 - Danger (CLP : Eye Dam. 1) H318

Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314

Acute toxicity, Inhalation - Category 2 - Danger (CLP : Acute Tox. 2) H330

Environmental hazards : Hazardous to the aquatic environment - Acute hazard -

3.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s) : T+ : Very toxic

C : Corrosive N : Dangerous for the environment

R Phrase(s) : R26 : Very toxic by inhalation

R35 : Causes severe burns.

R50 : Very toxic to aquatic organisms.

S Phrase(s) : S1/2 : Keep locked up and out of reach of children.

S7/9 : Keep container tightly closed and in well-ventilated place.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

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 : H330 : Fatal if inhaled.

H314 : Causes severe skin burns and eye damage.

H400 : Very toxic to aquatic life.

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 : P284: Wear respiratory protection.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

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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.

P264: Wash thoroughly after handling.

☒ Response : 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.

P363: Wash contaminated clothing before reuse.

☒ 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.

### 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

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### 4.1. Description of first aid measures

Inhalation : Specific treatment is urgent (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 with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor.

Eye contact : Remove contact lenses, if present and easy to do. Continue rinsing.

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Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes.

Ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Fatal if inhaled.

Causes severe skin burns and eye damage.

#### 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

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#### 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

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#### 6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

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## 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

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## 7.1. Precautions for safe handling

Handling : Wash thoroughly after handling. Avoid contact during pregnancy or while nursing. Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray.

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 regulation : Comply with applicable regulations.

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

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## 8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure

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☒ Respiratory protection : Wear respiratory protection.

☒ 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

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## 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] : 7.2 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : N/A

Flammability (solid, gas) : N/A

Flash point [°C] : N/A

Boiling point [°C] : 580C

Initial boiling point [°C] : N/A

Final boiling point [°C] : N/A

Evaporation rate : N/A

Vapour pressure [20°C] : 233hPa at 20 °C

Vapour pressure mm/Hg : N/A

Vapour density : 5,52

Density [g/cm<sup>3</sup>] : 3,119

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : 4 g/100 ml water @ 2

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Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A

Viscosity at 40°C [mm<sup>2</sup>/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

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### 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.

Thermal decomposition generates : Corrosive vapours.

## 11. Toxicological information

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### 11.1. Information on toxicological effects

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Acute toxicity

☒ Inhalation : Fatal if inhaled.

☒ Dermal : Based on available data, the classification criteria are not met.

☒ Ingestion : Based on available data, the classification criteria are not met.

Corrosion : Causes severe skin burns and eye damage.

Causes serious eye damage.

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 : 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

[www.rxmarine.com](http://www.rxmarine.com)

### 12.1. Toxicity

Toxicity information : Very toxic to aquatic life.

### 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

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### 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

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### 14.1. Land transport (ADR-RID)

Proper shipping name : BROMINE or BROMINE SOLUTION

UN N° : 1744

H.I. nr : 886

ADR - Class : 8

Labelling - Transport : 8 : Corrosive substance. 6.1 : Toxic substances.

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ADR - Classification code : CT1

ADR - Group : I

ADR - Packing instructions : P804

ADR - Limited Quantity : 0

ADR - Tunnel code : C/D : Tank carriage: Passage forbidden through tunnels category

C, D and E.

Other carriage: Passage forbidden through tunnels of category D and E.

### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : BROMINE or BROMINE SOLUTION

UN N° : 1744

IMO-IMDG - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. )

IMO-IMDG - Packing group : I

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IMO- IMDG - Packing instructions : P601

IMO-IMDG - Limited quantities : None

IMO-IMDG - Marine pollution : Yes

EMS-Nr : F-A S-B

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : BROMINE or BROMINE SOLUTION

UN N° : 1744

IATA - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. )

IATA - Packing group : I

IATA - Passenger and Cargo Aircraft : NOT ALLOWED

IATA - Cargo only : NOT ALLOWED

ERG-Nr : 8P

## 15. Regulatory information

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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

[www.rxmarine.com](http://www.rxmarine.com)

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

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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) N° 1907/2006 and with CLP Regulation

(CE) N° 1272/2008

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