

## 1. Product and Company Identification

www.rxmarine.com

Product Name

RXSOL-60-6604-093

Product Type

BROMINE 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

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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**

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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 -

Category 1 - Warning (CLP : Aquatic Acute 1) H400

### 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**



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**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.

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.

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**?** **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. 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**

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**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.

### 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.

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### 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.

☒ **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

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**Final boiling point [°C] : N/A**

**Evaporation rate : N/A**

**Vapour pressure [20°C] : 233 hPa 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**

**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.**

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### 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

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

### 11.1. Information on toxicological effects

#### 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.

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**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

**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

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

### 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

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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

**IMO-IMDG - Packing instructions :** P601

**IMO-IMDG - Limited quantities :** None

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**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)

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**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) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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