# Material Safety Data Sheet

**Hydrobromic Acid** (RXSOL-19-3073-035)

## 1. Product and Company Identifaction

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|---|---|
| Product Name | : Hydrobromic Acid |
| Part Number | : RXSOL-19-3073-035 |

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Sikka, Dahej, Hazira, JNPT, Goa, Mangalore, Cochin, Tuticorin, Chennai, Kakinada, Vizag, Paradip, Kolkata, UAE, Singapore.

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|---|---|
| Phone | +91 22 27815540 / 41 / 42 |
| Fax | +91 22 2781 1318 :::AOH :0091 9821214367 |
| Email | 123@rxmarine.com |
| Website | www.rxmarine.com |


## 2. Composition / informationon ingredients

| Name of Substance | Cas Number | EINECS No | Wt.% | Symbol |
|---|---|---|---|---|
| Hydrobromic acid | 10035-10-6 | 233-113-0 | >= 40 - 50% | Xi |

## 3. Hazards Identification

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| Signal Word | Danger |
| Hazard Statements | H314 Causes severe skin burns and eye damage.<br>H335 May cause respiratory irritation. |
| Precautionary statements - prevention | P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Precautionary statements - response | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: 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/ physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.<br>Storage: Store locked up. Store in corrosive resistant stainless steel container with a resistant inner liner.<br>Disposal: Dispose of contents/ container to an approved waste disposal plant. |
| Supplemental Hazard Statements | none |
| Other hazards | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| Mixtures | Synonyms : Hydrobromic acid Formula : HBr Molecular weight : 80,91 g/mol |

## 4. First Aid Measures

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| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. |
| Inhalation: | If inhaled, If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. |
| Ingestion: | If swallowed, do not induce vomiting. Allow victim to rinse his mouth and then to drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Call a physician. |
| Notes to Physicians | Treat symptomatically. |
| If swallowed | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| Most important symptoms and effects, both acute and delayed | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 |
| Indication of any immediate medical attention and special treatment needed | No data available |

## 5. Fire-fighting Measures

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| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Protective Equipment | Use personal protective equipment. |
| Hazardous combustionproducts | Decomposition products may include the following materials:<br>Nitrous gases (NOx),Sulphur oxides,Ammonia (NH3) ,Amines. |
| Advice for firefighters | Wear self-contained breathing apparatus for firefighting if necessary |
| Specific extinguishing methods | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |
| Special hazards arising from the substance or mixture | Hydrogen bromide gas |
| Further information | No data available |

## 6. Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8. |
| Enviromental Precaution | Prevent further leakage or spillage if safe to do so. Do not let product enter drains |
| Methods and materials for containment and cleaning up | Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. |
| Reference to other sections | For disposal see section 13. |

## 7. Handling and Storage

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| Advice on safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection. For precautions see section 2.2. |
| Storage | Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Air and light sensitive. |
| Advice on general occupational hygiene | Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. |
| Specific end use(s) | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated |

## 8. Exposure controls and personal protection

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| Engineering Control | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. |
| Personal Protection | Eye protection : Wear eye protection/ face protection.<br>Hand protection : Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |

Exposure Limits:

| Ingredients | CAS No | Form of exposure | Value | UK EH40 OES (table 2 ) |
|---|---|---|---|---|
| Sulphur Dioxide | 7446-09-5 | TWA | 5.3 mg/m3 | 2 ppm |
| | | STEL | 13 mg/m3 | 5 ppm |
| Ethane-1-2-Diol | 107-21-1 | TWA | 52 mg/m3 | 20 ppm |
| | | STEL | 104mg/m3 | 40 ppm |
| Oropan-2-ol | 67-63-0 | TWA | 999 mg/m3 | 400 ppm |
| | | STEL | 1,250 mg/m3 | 500 ppm |

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.



Gloves



Suit

## 9. Physical and chemical properties

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| Form | Liquid |
| Colour | Light Brown |
| Odour | No Data available |
| Boiling point and boiling range | 100 °C at 1.013 hPa |
| Flash Point | Not applicable |
| Freezing Point | No Data Available |
| pH | No Dataavailable |
| Evaporation rate | No Dataavailable |
| Flammability (solid, gas) | No Dataavailable |
| Upper explosion limit | No Dataavailable |
| Lower explosion limit | No Dataavailable |
| Explosive properties | No Dataavailable |
| Vapor pressure | 11 hPa at 25 °C |
| Relative vapor density | 2,79 - (Air = 1.0) |
| Relative density | 1,49 g/cm3 at 25 °C |
| Water solubility | No Dataavailable |
| Solubility in other solvents | No Dataavailable |
| Partition coefficient: octanol | No Dataavailable |
| Autoignition temperature | No Dataavailable |
| Thermal decomposition | No Dataavailable |
| Viscosity, kinematic | No Dataavailable |
| Explosive properties | No Dataavailable |
| Oxidizing properties | No Dataavailable |
| Molecular weight | No Dataavailable |
| VOC | No Dataavailable |
| Other safety information | Relative vapour density 2,79 - (Air = 1.0) |

## 10. Stability and reactivity

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| Recativity | No Dataavailable |
| Stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | No data available |
| Incompatible materials | Strong oxidizing agents, Strong bases, Ammonia, Ozone, Fluorine |
| Hazardous Decomposition | Hazardous decomposition products formed under fire conditions. - Hydrogen bromide gas Other decomposition products - No data available In the event of fire: see section 5 |
| Condition to Avoid | None Known |
| Polymerization | Will not occur. |

## 11. Toxicological information

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| Route of Exposure | Inhalation, Eye contact, Skin contact |
| Eyes | No Dataavailable |
| Skin | No Data available |
| Ingestion | Causes digestive tract burns |
| Inhalation | Inhalation of vapours leads to irritation of respiratory tract and mucous membranes, headache, nausea, dizziness, vomiting. Sensitisation possible through inhalation |
| Chronic Exposure | Health injuries are not known or expected under normal use. |
| Acute oral toxicity | LD50 200-2,000mg/kg |
| Acute inhalation toxicity | No data available |
| Acute dermal toxicity | No data available |
| Classification | The classification was made by the conventional (calculation) method of Dangerous Preparations Directive(1999/45/EC) |

## 12. Ecological information

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| Environmental Effects | No Dataavailable |
| Toxicity to fish | No Dataavailable |
| Toxicity to daphnia and others | No Dataavailable |
| Toxicity to algae | No Dataavailable |
| Biodegradability | > 60% (28 d) |
| Persistence and degradability | No Dataavailable |
| Bioaccumulative potential | No Data available |
| Mobility in soil | No Dataavailable |
| Persistence and degradability | No Dataavailable |
| Bioaccumulative potential | No Dataavailable |
| Results of PBT and vPvB assessment | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher |
| Other adverse effects | No data available |

## 13. Disposal considerations

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| Remarks | Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. |
| Waste Disposal | Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. |
| Contaminated packaging | Dispose of as unused product. |

## 14. Transport information

Hazard Pictograms:

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| UN Number | ADR/RID: 1788 IMDG: 1788 IATA: 1788 |
| Proper shipping name | ADR/RID: HYDROBROMIC ACID IMDG: HYDROBROMIC ACID IATA: Hydrobromic acid |
| Transport hazard class(es) 8 | |
| ADR/RID | 8 |
| Subsidiary risk IMDG | 8 |
| Subsidiary risk IATA | 8 |
| Packing group | |
| Packing group | II |
| Environmental hazards | |
| Environmental hazards | No |
| Marine pollutant | No |
| ADR/RID | |
| Hazard ID | 80 |
| Tunnel Category | (E) |
| IMDG | |
| EmS Code | F-A S-B |
| IATA | |
| Packing Instruction (Cargo) | 856 |
| Maximum quantity | 60 L |
| Packing Instruction (Passenger) | 852 |
| Maximum quantity | 5 L |

## 15. Regulatory information

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| Regulations | This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 |
| Chemical safety assessment | For this product a chemical safety assessment was not carried out |
| Further information | FOR INDUSTRIAL USE.<br>Water Hazard Class:. WGK 1.<br>PR Number - 1821143. Product Declaration Number - P-14188 (Norwegian). |

## 16. Other information

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| Other Information | The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.<br><br>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. |