



# SAFETY DATA SHEET

## 1. Identification:

**Product Identifier:** Hydrochloric Acid, various dilutions

**Product code:** BH8179 = 50% (v/v)    BH8180 = 25%(v/v)    BH8181 = 20% (v/v)    BH8178=10%(v/v)  
BH8127 = 5% (v/v)    BH8119 = 10.00 N    BH4160 = 6.00 N    BH8161 = 5.00 N  
BH8111 = 3.00 N    BH8115 = 2.50 N    BH4162 = 2.00 N    BH4164 = 1.00 N  
BH4170 = 0.100 N    BH4166 = 0.500 N    BH8167 = 0.400 N    BH4168 = 0.250 N  
BH4169 = 0.200 N    BH8160=1:2  
Titrated

**Synonym(s):** Hydrochloric Acid; Hydrogen Chloride, aqueous solution

**Recommended use:** Manufacture of other chemical products, professional, scientific, and technical activities.

**Recommended restrictions:** None known.

## Manufacturer/Supplier/Distributor Information

**Company name:** Biopharm Inc.  
**Address:** 187 South Tilley Road  
Hatfield, AR 71945  
**Telephone:** (870) 389-6114  
**Website:** www.bphchem.com  
**E-mail:** support@bphchem.com  
**Emergency phone number:** Chemtrec 800-424-9300

## 2. Hazard(s) identification:

**Classification:** This chemical is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target organs – Respiratory system	

**Label elements:**



**Signal word:** Danger

**Hazard statement:** Harmful if swallowed or inhaled  
May cause respiratory irritation  
Causes eye damage  
Causes skin burns

**Precautionary statement:**

<b>Prevention</b>	Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Avoid prolonged or repeated exposure. Use with adequate ventilation. Wash thoroughly after handling.
<b>Response</b>	Give several glasses of water or milk and do NOT induce vomiting. Never give anything by mouth to an unconscious person. INHALATION: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, have trained person administer oxygen. SKIN CONTACT: Immediately flush with cool, running water for at least 15 minutes. EYE CONTACT: While holding lids gently, but firmly apart, irrigate eyes with cool, clear running water for several minutes.
<b>Storage</b>	Store bottles tightly capped and upright. Keep in a cool place away from direct sunlight. Store locked up.
<b>Disposal</b>	To be performed in compliance with all current local, state and federal regulations. Spills onto sand, soil, or other absorbent may be handled by placing the affected soil into approved containers then label and store for proper treatment or disposal.
<b>Hazard(s) not otherwise classified (HNOC):</b>	Not classified.
<b>Supplemental information:</b>	Empty containers may be hazardous because of residues observe all warnings.

**3. Composition/information on ingredients**

**Mixtures**

<u>Chemical Name</u>	<u>CAS number</u>	<u>%</u>
Hydrochloric Acid	7647-01-0	0.3 to 18
Water	7732-18-5	balance

**4. First-aid measures**

In all cases of exposure, obtain medical attention immediately.

- Inhalation:** Remove person to fresh air. If breathing has stopped, perform cardio-pulmonary resuscitation. Have oxygen available for administration by a trained person if breathing is difficult.
- Ingestion:** Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Immediately obtain medical care.
- Skin contact:** Flood area with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing and clean shoes thoroughly before reuse.
- Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes while holding lids gently, but firmly, apart. Lift upper and lower lids occasionally to ensure thorough flushing under them. Prompt action is necessary to minimize possibility of blindness.
- Most important symptoms/effects, acute and delayed:** Causes severe skin burns and eye damage. Possible inflammation of the respiratory tract. Caustic burns/corrosion of the skin. Causes serious eye damage. Nausea. Vomiting. Irritation of the gastric/intestinal mucosa. Diarrhea. Affection/discoloration of the teeth.
- General information:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

**5. Fire-fighting measures**

<b>Suitable extinguishing media:</b>	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
<b>Unsuitable extinguishing media:</b>	Do not use a heavy water stream.
<b>Specific hazards arising from the chemical</b>	Not considered to be a fire or explosive hazard.
<b>Special protective equipment and precautions for firefighters</b>	Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
<b>Fire-fighting equipment/instructions</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental release measures**

<b>Personal precautions, protective equipment, and emergency procedures:</b>	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep out of low areas. Ensure adequate ventilation. Avoid inhalation of vapors or mists.
<b>Methods and materials for containment and cleaning up:</b>	Ventilate area and remove all sources of ignition. Wear protective clothing and equipment. Use an absorbent material such as sand, sawdust, or vermiculite to absorb small spills or any leakage that cannot be recovered for recycling. Wash area thoroughly with water after recovering released material. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions:</b>	Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses, or onto the ground. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

**7. Handling and storage**

<b>Precautions for safe handling:</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Do not get this material on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.
<b>Conditions for safe storage, including any incompatibilities:</b>	Store bottles tightly capped and upright. Keep in a cool place away from direct sunlight.

**8. Exposure controls/personal protection**

**Exposure Guidelines:**

<u>Component</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Hydrogen Chloride	2 ppm; 2.98 mg/m <sup>3</sup> (TWA)	5 ppm; 7 mg/m <sup>3</sup> (TWA)

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<b>Engineering measures:</b>	Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal protective equipment:</b>	
<b>Eye/face protection:</b>	Wear protective eyeglasses or chemical safety goggles.
<b>Skin and body protection:</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory protection:</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance:</b>	Clear, colorless solution.
<b>Odor:</b>	Slight acrid odor.
<b>Odor threshold:</b>	No information available
<b>Vapor Pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>pH:</b>	No information available
<b>Relative density:</b>	No information available
<b>Melting point/freezing point:</b>	No data available
<b>Solubility in Water:</b>	Complete
<b>Boiling Point</b>	212° F
<b>Flash point:</b>	Non-flammable
<b>Evaporative Rate</b>	No information available
<b>Flammability (solid, gas):</b>	No information available
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower</b>	No data available
<b>Flammability limit - upper</b>	No data available
<b>Explosive limit - lower</b>	No data available
<b>Explosive limit - upper</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature:</b>	No information available
<b>Decomposition temperature:</b>	No information available available
<b>Viscosity:</b>	No information available available
<b>Other information:</b>	
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	No information available
<b>Percent Volatile by Volume:</b>	No information available.

**10. Stability and reactivity**

<b>Reactivity:</b>	Not available
<b>Chemical stability:</b>	Stable under ordinary conditions of use and storage.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid:</b>	Incompatible materials, extreme heat.
<b>Incompatible materials:</b>	Metals. Cyanides. Strong bases.
<b>Hazardous decomposition products:</b>	Hydrogen chloride. Thermal decomposition generates: Corrosive vapors.

**11. Toxicological information**

**Information on likely routes of exposure:**

<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Induce vomiting by giving syrup of ipecac or gently placing two fingers at the back of the throat. Call a physician.
<b>Inhalation:</b>	Remove person to fresh air. If breathing has stopped, perform cardio-pulmonary resuscitation. Have oxygen available for administration by a trained person if breathing is difficult. Obtain medical assistance. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic.
<b>Skin Contact:</b>	Flood area with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing and clean shoes thoroughly before reuse. If systems persist, obtain medical assistance.
<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes while holding lids gently, but firmly, apart. Lift upper and lower lids occasionally to ensure thorough flushing under them. If symptoms persist, obtain medical assistance.

**Information on toxicological effects**

**Acute toxicity**

<u>Component</u>	<u>LD50 Oral</u>	<u>LD50 Dermal</u>	<u>LC50 Inhalation</u>
Hydrogen Chloride	900 mg/kg (rat)	No data available	3124 ppm/ 1 hr

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/ irritation</b>	Cause severe skin burns and eye damage.
<b>Serious eye damage/ irritation</b>	Cause severe eye damage.
<b>Respiratory Sensitization</b>	May cause coughing, labored breathing and shortness of breath. Can be fatal if inhaled.
<b>Skin sensitization</b>	No data available.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, NTP, or OSHA.
<b>Mutagenic effects</b>	No data; relevance of laboratory animal studies to humans is unknown
<b>Reproductive effects</b>	No data; relevance of laboratory animal studies to humans is unknown

<b>STOT – single exposure</b>	No information available.
<b>STOT – repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Chronic effects</b>	Affection/discoloration of the teeth.

## 12. Ecological information

<b>Ecotoxicity:</b>	Do not empty into drains.
<b>Persistence and degradability:</b>	No information available.
<b>Bioaccumulation/ Accumulation:</b>	No information available
<b>Mobility in soil:</b>	No information available
<b>Other adverse effects:</b>	No information available

## 13. Disposal considerations

<b>Waste disposal methods:</b>	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
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## 14. Transport information

<b>DOT:</b>	
<b>UN number:</b>	UN1789
<b>UN proper shipping name:</b>	Hydrochloric Acid Solution
<b>Hazard class(es)</b>	Class 8
<b>Subsidiary class(es)</b>	N/A
<b>Packing group</b>	II
<b>Other information</b>	Limited Quantity – One liter or less

## 15. Regulatory information

### U.S. Federal regulations

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D)** Not regulated

**U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** Not regulated

**CERCLA Hazardous Substances List (40 CFR 302.4)** Not listed

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard Categories</b>	Acute Health Hazard – Yes
	Chronic Health Hazard – Yes
	Fire Hazard – No
	Pressure Hazard – No
	Reactivity Hazard – No

### Other Federal regulations

**Clean Air Act**            Not applicable  
**Clean Water Act**        Not applicable  
**California Prop 65**      This product does not contain any Proposition 65 chemicals.

**16. Other information, including date of preparation or last revision**

**Revision date**            July 5, 2024

**Disclaimer**                The statements contained herein are offered as informational data only and are believed to be correct. However, this product should be handled by persons having related technical skills, and at their own discretion and risk. Since seller has no control over the use of this product, no warranty, expressed or implied, is made and seller assumes no liability in connection with any use of this information or from contact and/or handling of this product.