



# Safety Data Sheet

## Hydrochloric Acid

### Section 1 Identification

**Trade Name:** Hydrochloric Acid  
**Product Identification:** GLA-H220  
**Synonyms:** None

**Date Prepared:** 05/16/2016  
**CAS No:** 7647-01-0

**Product Use Description:**  
Industrial Inorganic Acid

#### Details of the supplier of the safety data sheet

G.L.A Water Inc.  
17802 Rapids Road  
HIRAM, OH 44234 US

**Phone:** (440) 834-8435  
**website:** www.glawater.com

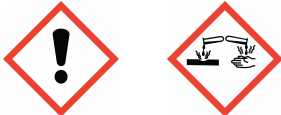
#### Emergency telephone number

Infotrac (800) 535-5053 (US & Canada)  
(352) 323-3500

### Section 2 Hazards Identification

**GHS Classification:** Corrosive to Metals Category 1  
Acute Toxicity Inhalation Category 4  
Skin Corrosion/Irritation Category 1A  
Serious Eye Damage/Irritation Category 1

#### GHS Labels:



Irritant Corrosive

**Signal Word:** Danger

#### Hazard Statements:

**H290** May be corrosive to metals  
**H312** Harmful in contact with skin  
**H314** Causes severe skin burns and eye damage  
**H318** Causes serious eye damage  
**H332** Harmful if inhaled

#### Precautionary Statements:

##### Prevention

**P234** Keep only in original container.  
**P260** Do not breathe gas, mist, vapour or spray.  
**P264** Wash skin thoroughly after handling.  
**P271** Use only outdoors or in a well-ventilated area.  
**P280** Wear protective gloves, protective clothing and eye protection or face protection.

##### Response

**P301 + P330 + P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
**P303 + P361 + P353** IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse SKIN with water.



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- P304 + P340** IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
- P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310** Immediately call a POISON CENTER or physician.
- P363** Wash contaminated clothing before reuse.
- P390** Absorb spillage to prevent material damage.

### Storage

- P405** Store locked up.

### Disposal

- P501** Dispose of contents/container to an approved waste disposal plant.

### Hazards Not Otherwise Classified (HNOC):

None.

### Additional Information:

None.

## Section 3 Composition

Chemical Name	Common Name/Synonym	CAS #	%
hydrochloric acid		7647-01-0	15 - 35

## Section 4 First Aid

### General:

Move out of dangerous area. Perform first aid measures as indicated. Seek immediate medical attention and show this safety data sheet to attending physician.

### Inhalation:

Move to fresh air and keep at rest in a position comfortable for breathing. If breathing difficulty occurs or persists seek immediate medical attention. If not breathing give artificial respiration and seek immediate medical attention.

### Skin Contact:

Immediately flush exposed skin with water for at least 15 minutes while removing contaminated clothing and/or shoes. Seek immediate medical attention.

### Eye Contact:

Immediately flush eyes with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. Check for and remove any contact lenses if easy to do. Seek immediate medical attention.

### Ingestion:

Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.

### Most important symptoms and effects both acute and delayed:

No information available.

### Indication of any immediate medical attention and special treatment needed:

No information available.

## Section 5 Fire Fighting Measures

### Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire or source of fire. Use water spray to cool fire exposed containers.

### Unsuitable Extinguishing Media:

No information available.

### Specific Hazards Developing From the Chemical:

In fire conditions after water loss, combustion may produce hydrogen chloride and other unidentified chemical compounds.

### Precautions for Firefighters:

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SDS ID: SDS00906

SDS #: GLA-H220  
Revision # 3

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No information available.

### Firefighting Instructions:

No information available.

### Protection During Firefighting:

Wear full protective gear and full face pressure demand self-contained breathing apparatus.

### Other Information:

No additional information available.

## Section 6 Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures:

Avoid direct contact with skin, eyes and clothing. Avoid inhalation of mist, vapor or dust. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

### Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Contain spilled material and prevent run-off onto ground or into water sources or sewers.

### Methods and material for containment and clean up:

Neutralize with appropriate alkaline material if possible. Absorb on inert material and place in containers for disposal. Dispose of spilled/collected material in accordance with all federal, state and local regulations.

## Section 7 Handling and Storage

### Precautions for Safe Handling:

Avoid contact with skin and eyes. Avoid inhalation of mist, vapor and dust. Ensure adequate ventilation. Do not eat, drink or smoke while handling. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

### Conditions for Safe Storage, including Incompatibilities:

Store in original container. Keep container tightly closed. Store at room temperature (50-90 F) in a dry well-ventilated area.

## Section 8 Exposure Controls/Personal Protection

### Exposure Limits:

Ingredient	Data Source	Exposure Form	Exposure Value	Exposure Notes
hydrochloric acid	ACGIH TLV	Ceiling	2 ppm	(03 2013)
	Airborne	Ceiling	5 ppm 7 mg/m3	US, CA Code of RegTitle 8, Sec 5155
	Contaminants-US-CA			
	ESL-US-TX	ST ESL	130 ppb	US, TX Effects Screening Levels
	NIOSH	Ceiling Time	5 ppm 7 mg/m3	Pocket Guide-Chemical Hazards(2010)
	OEL-US-TN	Ceiling	5 ppm 7 mg/m3	Table Z1A (06 2008)
	OSHA Z-1	Ceiling	5 ppm 7 mg/m3	Limits-Air Cont(29 CFR 1910.1000)
OSHA Z-1-A	Ceiling	5 ppm 7 mg/m3	(29 CFR 1910.1000) (1989)	

### Appropriate Engineering Controls:

Use local and/or general exhaust ventilation to maintain airborne concentrations below irritating levels or exposure limits. An eyewash and safety shower should be available in the work area.

### Individual Protection Measures:

#### Eye/Face Protection:

Chemical goggles or face shield should be worn when handling this material.

#### Skin Protection:

##### Hand Protection:

Wear chemical resistant gloves when handling.

##### Other:

Wear chemical resistant clothing or chemical splash suit when handling.



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**Respiratory Protection:**

Wear respiratory protection while using this material.

**General Hygiene Considerations:**

Follow good hygiene and safety practice. Wash hands and exposed skin before breaks and at the end of the work day. Do not eat, drink or smoke while handling this material. Do not wear contaminated or dirty clothing home from the work-site. Launder contaminated or dirty clothing before reuse.

**Additional Information:**

No additional information available.

### Section 9 Physical and Chemical Properties

<b>Appearance</b>	Clear Colorless Liquid
<b>Odor</b>	Strong Pungent
<b>Odor threshold</b>	Not available.
<b>pH</b>	<1
<b>Melting/freezing point</b>	-12° to -15°F (-11° to -26°C)
<b>Initial boiling point</b>	217°F (103°C)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Lower flammability limit</b>	Not available.
<b>Upper flammability limit</b>	Not available.
<b>Lower explosive limit</b>	Not available.
<b>Upper explosive limit</b>	Not available.
<b>Vapor pressure</b>	16-63 mm Hg @ 20°C
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility in water</b>	Miscible
<b>PC: n-octanol/water</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	1.15-1.77 cps @ 20°C
<b>Density</b>	8.76-9.91 lb/gal
<b>Specific gravity</b>	1.04-1.19

### Section 10 Stability and Reactivity

<b>Reactivity :</b>	Not reactive under normal use conditions.
<b>Chemical Stability :</b>	Material is stable under normal handling and storage conditions.
<b>Hazardous Reactions :</b>	Hazardous polymerization will not occur under normal handling and storage.
<b>Conditions to Avoid :</b>	Avoid excessive heating, freezing and chemical contamination.
<b>Decomposition Products:</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
<b>Incompatible Materials:</b>	Avoid contact with alkaline chemicals and unwanted contact with metals.

### Section 11 Toxicological Information

**Information on the likely routes of exposure:****Inhalation:**

This material may cause respiratory irritation, which can be severe and result in perminate damage.

**Skin Contact:**

This material may cause skin irritation, which can be severe and result in perminate damage.

**Eye Contact:**

This material may cause eye irritation, which can be severe and result in perminate damage.



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**Ingestion:**

This material may cause gastrointestinal irritation, which can be severe and result in perminate damage.

**Symptoms related to the physical, chemical and toxicological characteristics:**

No information available.

**Delayed and chronic effects:**

No information available.

**Numerical measures of toxicity:**

Components	Exposure	Species	Dose	Notes
<b>hydrochloric acid:</b>				
Oral	LD50	Rat	700 mg/kg	
Dermal	LD50	Rabbit	>5010 mg/kg	
Inhalation	LDCO	Rat	3124 mg/l	1 hr

**Toxicological Effects:****Acute Toxicity:**

Mixture:

No information available.

**Skin Corrosion/Irritation:**

Mixture:

No information available.

**Serious Eye Damage/Irritation:**

Mixture:

No information available.

**Respiratory Sensitization:**

Mixture:

No information available.

**Skin Sensitization:**

Mixture:

No information available.

**Germ Cell Mutagenicity:**

Mixture:

No information available.

**Carcinogenicity:**

Mixture:

This product is considered to be a potential carcinogen by:

NTP: No

OSHA: No

IARC: No

**Reproductive Toxicity:**

Mixture:

This product is not expected to cause reproductive and developmental effects.

**STOT-Single Exposure:**

Mixture:

No information available.

**STOT-Repeated Exposure:**

Mixture:

No information available.

**Aspiration Hazard:**

Mixture:

This product is not an aspiration hazard.

**Additional Information:**

None.

## Section 12 Ecological Information

**Ecotoxicity:**

No information available.



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### Numerical Measures of Ecotoxicity:

Components	Type	Species	Dose	Notes
<b>hydrochloric acid:</b>				
Fish	LC50	Mosquito Fish	282 mg/l	96 hr
Invertebrate	LC50	Shore Crab	240 mg/l	48 hr

### Persistence and Degradability:

Mixture:

No information available.

### Bioaccumulative Potential:

Mixture:

No information available.

### Mobility in Soil:

Mixture:

No information available.

### Other Adverse Effects:

Mixture:

No information available.

### Additional Information:

No information available.

## Section 13 Disposal Considerations

### Disposal Instructions:

Dispose of material in accordance with all federal, state and local regulations.

### Contaminated Packaging:

Triple rinse container and offer for recycling. Dispose of container following all federal, state and local regulations.

### Additional Information:

No additional information available.

## Section 14 Transport Information

### DOT:

**UN number:** UN1789

**UN proper shipping name:** UN1789, Hydrochloric Acid, Solution, 8, PGII

**Class:** 8

**Subsidiary risk:** none

**Label(s):** 8

**Packing group:** II

**Packaging exceptions:** none

## Section 15 Regulatory Information

### Federal Regulations:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

### SARA 311/312 Hazard Categories:

None.

### SARA 302 Extremely Hazardous Substance:

Not listed.

### SARA 304 Emergency Release Notification:

Not regulated.

### SARA 311/312 Hazardous Chemical:

No

### SARA 313 Toxic Release Inventory (TRI) Report:

Not regulated.



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**CERCLA Hazardous Substance List:**

Not Listed.

**Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA):**

This chemical is not a pesticide product.

**Clean Air Act Regulated Substances:**

Accidental Release Prevention - Toxic Substances:  
hydrochloric acid

**Clean Water Act Regulated Substances:**

None.

**U.S. State Regulations:**

None.

**Canadian Regulations:**

**Canadian Ingridient Disclosure List Substances:**

None listed.

**WHMIS Classification:**

Not classified.

### Section 16 Other Information

**HMIS Hazard ID:**

<b>HEALTH</b>	3
<b>FLAMMABILITY</b>	0
<b>REACTIVITY</b>	1
<b>PERSONAL PROTECTION</b>	H

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; \*-Chronic Health Effect

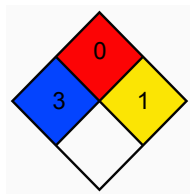
**NFPA Hazard ID:**

Flamability:

Health:

Reactivity:

Special Hazard:



Hazard Rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Disclaimer:** The Manufacturer believes that the information contained in the Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of the publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

**Issue Date:** 05/16/2016

**Revision:** 3