



Safety Data Sheet

1. Product and Company Identification

Product Description: Hydrochloric Acid

Product Formulation Name: Hydrochloric Acid 31%-37%, 20-22 Baume

Manufacturer

Carbonfree Chemicals
11503 Bulverde Road
San Antonio, TX 78217

24 HR. Emergency Telephone Numbers

CHEMTREC: 800-924-9300

2. Hazards Identification

GHS Classifications

Physical

Corrosive to Metals

Skin Corrosion

GHS Label



Corrosion

Danger

H314: Causes severe skin burns and eye damage



Health Hazard

Danger

H371: May cause damage to organs [or state all organs affected, if known] [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]

Precautionary Statement(s)

General:

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P264: Wash...thoroughly after handling

P270: Do not eat, drink, or smoke when using this product.

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

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove 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.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.



EMERGENCY OVERVIEW

Physical Appearance: Clear, colorless, Acrid odor

Imitate Concerns: Corrosive

Potential Health Effects

Eyes: DANGER Corrosive to the eyes and may cause severe damage including blindness

Skin: CORROSIVE Causes burns to skin

Ingestion: CORROSIVE can burn mouth, throat and stomach

Inhalation: Inhalation of gas may cause cough, difficulty breathing, nasal irritation and/or discharge, and alteration of taste and smell. Severe overexposure may result in pulmonary edema, permanent lung damage, or death.

3. Composition/Information on ingredients

Chemical Name	Wt.%	CAS	EINECS
Hydrochloric Acid	31 – 37	7647-01-0	231-595-7
Water	63 – 69	7732-18-5	231-791-2

4. First Aid Measures

Eyes: Immediately flush eyes with tempered water (60-100°F) for 15 minutes minimum. Consult a physician or other health care professional.

Skin: Immediately flush skin with plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Inhalation: Immediately remove to fresh air. If exposure has been severe. Give artificial respiration and CPR (cardiopulmonary resuscitation) as needed. If short of breath, give oxygen, provided a qualified operator is available. Get immediate medical assistance.

5. Fire Fighting Measures

General Hazard: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use any means suitable for extinguishing the surrounding fire.

Fire Fighting Equipment Firefighters should wear full protective clothing and NIOSH approved positive pressure self-contained breathing apparatus.

Hazardous Decomposition Products: Thermal decomposition may release toxic gases such as chlorine and hydrogen chloride gas.

6. Accidental Release measures

Small Spill: Neutralize spill with soda ash, lime, or other suitable base. Use extreme caution as the acid may react with the neutralization agent.

Large Spill: Stop leak as its source if you are able to do so safely. Dike area to contain spill. Take precautions as necessary to prevent material from entering sewers or storm drains or contamination of ground and surface waters. Wear appropriate personal protective equipment as outlined in Section 8 during cleanup operations. Extreme caution should be exercised during cleanup operations as surfaces where material has been spilled are likely to become very slippery. Collect spilled material into containers using pumps or other means if it is possible to do so safely. Recover spilled material using chemically neutral absorbent such as ground clay or vermiculite, and collect into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

Comments: Dispose of spilled neutralized, or waste product, contaminated soil, and other contaminated materials in accordance with all local, state, and federal regulations.



7. Handling and Storage

General Procedures: Use with adequate ventilation.

Handling: Avoid contact with eyes, skin, and clothing. Avoid breathing dusts, vapors, mists, and gases.

Storage: Store in a cool dry place.

8. Exposure Controls/Personal Protection

Exposure Guidelines

OSHA Hazardous Components (29 CFR1910.1200)					
Chemical Name				OSHA PEL	ACGIH TLV
		ppm	mg/m ³	ppm	mg/m ³
Hydrochloric Acid	TWA	5 ppm	7 Mg/m ³	NL	NL

Engineering Controls: Use Process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment

Eyes and Face: Use appropriate ANSI- approved protective eye and face devices. (Currently, OSHA has incorporated ANSI Z87.1 1989 by reference into the federal regulations. The ANSI committee of industry experts has also approved a newer ANSI standard on the Practice for Occupational and Educational Personal Eye and Face Protective Devices, identified as Z87.1 2003, or Z87 +).

Skin: Where splashing is possible, full chemically resistant protective clothing; gloves, boots, and aprons or coveralls are required.

Respiratory: When conditions require respiratory protection (either air-purifying or supplied air), select suitable NIOSH/MSHA approved equipment using current regulatory guidance and/or ANSI/AIHA Z88.2 Z recommendations.

Protective Clothing: For body protection wear impervious clothing such as an approved splash protective suit made of SBR Rubber, PVC (PVC Outer shell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/G ore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboots made of n nylon or nylon blends. DO NOT use cotton, wool or leather, as these materials react RAPIDLY with higher concentrations of hydrochloric acid. Completely submerge hydrochloric acid contaminated clothing or other materials in water prior to drying. Residual hydrochloric acid, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Work Hygienic Practices: No food, drink, or smoking should be permitted in areas where this material is in use.

9. Physical and chemical properties

Physical State: Liquid

Odor: Acrid odor

Appearance: clear

Color: colorless

pH: <1

Solubility in water: Complete

Specific Gravity: 1.160 to 1.18

10. Stability and Reactivity

Stable: Yes

Hazardous Polymerization: No

Stability: Product is stable under normal conditions.

Polymerization: Will not occur

Hazardous Decomposition Products: Chlorine

Incompatible Materials: Hydroxides, amines, alkalis, cooper, brass, zinc [Note: Hydrochloric acid is highly corrosive to most metals.]

11. Toxicological Information

EYE EFFECTS: Corrosive to eyes.

SKIN EFFECTS: Corrosive to skin.

CARCINOGENICITY

Chemical Name	IARC Status
Hydrochloric Acid	3

12. Ecological Information

ENVIRONMENTAL DATA: Do not flush to sewer.

BIOACCUMULATION/ACCUMULATION: No data available. Contact your Environmental, Health and Safety officer.

AQUATIC TOXICITY (ACUTE)

96-HOUR LC50: 282 mg/l (Mosquito fish)

13. Disposal Considerations

DISPOSAL METHOD: Do not wash down drain or allow reaching natural watercourses. Dispose of neutralized waste in a manner consistent with regulatory requirements.

EMPTY CONTAINER: To meet the regulatory or definition of an empty container, all residual product must be removed that can be removed using the practices commonly employed to remove materials from that type container, e.g. pouring, pumping, and aspirating. For additional information please reference 40 CFR Section 261.7(b) (1) through (b) (1) (iii).

RCRA/EPA WASTE IN FORMATION: It is strongly recommended that current regulatory requirements be reviewed prior to disposal.

14. Transport Information

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Hydrochloric Acid PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN1789

PACKING GROUP: II

NAERG: 157

PLACARDS: Corrosive

LABEL: Corrosive

15. Regulatory Information

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive



SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** No

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Hydrochloric Acid	31 - 37	7647-01-0

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Hydrochloric Acid	31 - 37	5,000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Hydrochloric Acid	7647-01-0
Water	7732-18-5

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Hydrochloric Acid	31 - 37	7647-01-0

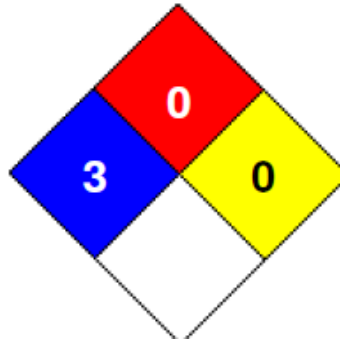
16. Other Information

Reason for Issue: Initial release

HMIS Rating

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input checked="" type="checkbox"/>	X

NFPA CODES



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Revised June 2020