



1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CL-120

Description: Inorganic Acid
Suggested Use: Industrial Water Treatment Descaler
Restrictions on Use: Do not mix with other industrial chemicals.

Supplier: Advanced Chemical Technology, Inc.
8728 Utica Avenue
Rancho Cucamonga, CA 91730

Telephone: 1-909-980-4556 or 1-800-632-1777
Fax: 1-909-980-9366

Emergency Phone: 1-800-255-3924 (CHEMTEL)

2. HAZARDS IDENTIFICATION

Classification

GHS Classification: Skin Corrosion (Category 1A)
Serious Eye Damage (Category 1)
Acute Toxicity, Oral (Category 4)
Acute Aquatic Toxicity (Category 3)
Corrosive to Metals (Category 1)

GHS Label Elements

Pictogram:

Signal Word: Danger

Hazard Statements: H290: May be corrosive to metals
H314: Causes severe skin burns and eye damage
H302: Harmful if swallowed
H335: May cause respiratory irritation
H402: Harmful to aquatic life

Precautionary Statements: P260: Do not breathe mist/vapors/spray
P264: Wash hands thoroughly after handling
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P303+P361+P353: IF ON SKIN OR HAIR: Remove all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P313: Get medical attention.

HMIS Classification: Health Hazard: 3
Flammability: 0
Physical Hazards: 1



NFPA Rating: Health Hazard: 3
Fire: 0
Reactivity Hazard: 1

Potential Health Effects

Inhalation: Severe irritant to mucous membranes and respiratory system
Skin: Will cause corrosive action on contact with skin. Severe burns to tissue may result.
Eyes: Severe irritation and burns to mouth, throat, esophagus and stomach.
Ingestion: This material is corrosive to the mouth and throat.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>Concentration</u>
Hydrochloric Acid (< 35%)	7647-01-0	31%

Synonyms:

4. FIRST AID MEASURES

If Inhaled: If not breathing, give artificial respiration. Consult a Physician.
Skin Contact: Immediately remove contaminated clothing and shoes, wash before reuse. Flush all affected areas with large amounts of water for at least 15 minutes.
Eye Contact: Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Obtain medical attention immediately.
If Ingested: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water (If available, give several glasses of milk). If vomiting occurs spontaneously, keep airway clear and give more water. Consult a physician immediately.

5. FIREFIGHTING MEASURES

Flammability Overview: Water solutions of hydrochloric acid are strongly acidic. May react with active metals to produce flammable hydrogen.
Flash Point: Not Applicable
Extinguishing Media: Water-spray, foam, carbon dioxide or dry chemical for fires in storage areas.
Special Protective Equipment for Firefighters: Wear a self-contained breathing apparatus (SCBA) for firefighting if necessary.
Hazardous Combustion Products: Hydrogen, Hydrogen chloride.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Wear goggles, rubber boots, respirator, and gloves.
Environmental Precautions: Prevent from entering drains and waterways. Discharge into the environment must be avoided.



Containment and Clean Up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. If assistance is needed call CHEMTEL or emergency services.

7. HANDLING AND STORAGE

Safe Handling: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Always ensure adequate ventilation.

Safe Storage: Keep containers tightly closed in a dry well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	CAS Number	Exposure Limit	Basis
Hydrochloric acid (< 35%)	7647-01-0	5 ppm ceiling	ACGIH Threshold Value (TLV)
		5 ppm ceiling	OSHA Table Z-1: Limits for Air Contaminants
		Not Established	NIOSH Recommended Exposure Limits

Personal Protective Equipment

Eye Protection: Wear tightly fitting safety goggles or safety glasses with a full-face shield. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH. Have eye-wash stations available where eye contact can occur.

Hand Protection: Handle with chemical-resistant gloves. Gloves must be inspected prior to use. Dispose of contaminated gloves. Wash and dry hands after use.

Skin Protection: Wear complete suit protection against chemicals, including chemical-resistant boots. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Safety showers should be located in the work area where skin contact can occur.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a NIOSH-approved full-face respirator with appropriate cartridges. For high concentrations, unknown concentrations, and for oxygen deficient atmospheres, use a NIOSH approved air-supplied respirator. Respiratory protection may be needed for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134.

General Controls: Always ensure adequate ventilation and that working areas contain safety showers and eye wash stations. Handle material in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Amber
Odor: Pungent



Odor Threshold:	Not Established
pH:	< 1
Melting/Freezing Point:	Not Established
Boiling Point:	185°F
Flash Point:	Not Established
Evaporation Rate:	Not Established
Flammability (solid, gas):	Not Established
Flammability/Explosion Limits:	Not Established
Vapor Pressure @ 20°C:	20mm Hg
Vapor Density:	1.27
Specific Gravity:	1.16
Density:	9.68
Solubility in Water:	Complete
Partition Coefficient:	Not Established
Autoignition Temperature:	Not Established
Decomposition Temperature:	Not Established
Viscosity:	Not Established

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures
Conditions and Materials to Avoid:	Strong oxidizing agents, strong caustic, metals
Hazardous Decomposition Products:	Hydrogen, Hydrogen chloride

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	CAS Number	Test	Toxicity
Hydrochloric Acid (< 35%)	7647-01-0	Oral LD50 (Rat)	900 mg kg
		Dermal LD50	Not Established
		Inhalation LC50 (Rat)	3124 ppm for 1 hr

Potential Health Effects

Inhalation:	Severe irritant to mucous membranes and respiratory system.
Skin:	Will cause corrosive action on contact with skin. Severe burns to tissue may result.
Eyes:	Severe burns and corneal damage will occur. Vapor is irritating to eyes.
Ingestion:	Severe irritation and burns to mouth, throat, esophagus and stomach.
Signs and Symptoms of Exposure:	Skin irritation and lesions, chronic asthma, emphysema and bronchitis.
Chronic Effects of Long-term Exposure:	Primary irritant dermatitis. Prolonged contact may result in destruction of tissue.
Carcinogenicity:	No component of this product at levels greater than 0.1% is identified as carcinogenic by IARC, ACGIH, or OSHA.



12. ECOLOGICAL INFORMATION

Acute Ecotoxicity

Component	CAS Number	Organism	Ecotoxicity
Hydrochloric Acid (< 35%)	7647-01-0	Bluegill/Sunfish	3.6 mg/L 48 Hr Lethal

Ecological Effects

Persistence and Degradability: Rapidly hydrolyzes when exposed to water

Bioaccumulation Potential: Not expected to bio-accumulate

Mobility in Soil: Will exhibit extensive evaporation from soil surfaces. Upon transport through the soil, hydrochloric acid will dissolve some of the soil materials (especially those with carbonate bases) and the acid will neutralize to some degree.

Other Adverse Effects: Harmful to aquatic life. The damaging effects are mostly the consequence of the increase in pH of the water.

13. DISPOSAL CONSIDERATIONS

Disposal: Surplus and non-recyclable material should be treated as hazardous waste and be disposed of by a licensed disposal company. Material should be disposed in accordance with all local, state, and federal regulations. Regulations vary by region. Do not release into sewers or waterways.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Corrosive liquids, n.o.s. (Hydrochloric acid)

UN Number: 1789

Hazard Class: 8

Packing Group: II

Reportable Quantity (RQ): Hydrochloric Acid: 5000 lbs.

Marine Pollutant: Not Established

Note: Regulated for both bulk and non-bulk.

15. REGULATORY INFORMATION

US Federal

SARA 302 Components: Not Established

SARA 311/312 Hazards: Acute Health Hazard

SARA 313 Components: This product contains a Section 313 listed toxic chemical subject to release reporting requirements Hydrochloric acid.



TSCA Inventory: All chemical components are listed on TSCA Inventory.

European Union

EC Inventory: None Listed

State Regulations

CA Prop 65: This product does not contain chemicals currently on the California list of known carcinogens and/or reproductive toxins.

16. OTHER INFORMATION

SDS Version: 1.0

Revision Date: 06/01/2015

Disclaimer: The information contained in this document was carefully compiled and is believed to be accurate. The information represents the present state of our knowledge and is applicable to the product with the regard to appropriate safety precautions. However, it does not represent any guarantee of the properties of the product. Advanced Chemical Technology, Inc. shall not be held liable for any damages resulting from handling or from contact with the above product. It is the responsibility of the purchaser to determine the suitability of the product for their particular purposes. Nothing contained herein shall be construed to be a recommendation to use, or as a license to operate under or to infringe any existing patents. For product information call Advanced Chemical Technology, Inc., 1-909-980-4556.