

IDENTITY: Hydrochloric Acid

Section I – Manufacturer Information

Anachemia Chemicals, Inc.
3 Lincoln Boulevard
Rouses Point, NY 12979

Telephone Number for Information:
(518) 297-4444
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EMERGENCY NUMBER: (800) 424-9300 (Chemtrec)

Trade names: Muriatic acid, Chlorohydric acid, AC-4955, AC-4955PG, AC-4955SP, AC-4955T, AC-4955GC, EP-4955, EG-4955

Section II – Hazard Ingredients/Identity Information

Hydrochloric Acid (as HCl)	30-38%	ACGIH Ceiling limit 5ppm (7.5 mg/m ³)
Water	Balance	Not established by ACGIH

Section III – Physical/Chemical Characteristics

Boiling Point: 108 to 110°C	Specific Gravity: 1.16 to 1.19
Vapor Pressure: 150 to 160 mm of Hg (@ 20°C)	Melting Point:
Vapor Density: 1.3	Evaporation Rate: >1

Solubility in Water: Miscible in water

Appearance and Odor: Colorless fuming liquid with a pungent odor.

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used): Not applicable
LEL:

Flammable Limits: Not applicable
UEL:

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Wear adequate personal protection to prevent contact with material or its combustion products. Self-contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Cool containing vessels with flooding quantities of water until well after fire is out. DO NOT get water inside container.

Special Fire Fighting Procedures:

Unusual Fire and Explosion Hazards: Flammable/explosive hydrogen gas may be formed upon contact of this product with metals. The sensitivity to impact is not applicable. The sensitivity to static discharge is not applicable. Emits toxic and corrosive fumes under fire conditions.

Section V – Reactivity Data

Stable or Unstable? Stable

Conditions to Avoid: High temperatures, sparks, open flames and all other sources of ignition, contamination.

Incompatibility (Materials to Avoid): Reacts with most common metals to produce hydrogen. Amines, metal oxides, acetic anhydride, beta-propiolactone, vinyl acetate, mercuric sulfate, calcium phosphide, formaldehyde, alkalis, carbonates, bases, sulfuric acid, chlorosulfonic acid, nitric acid, oxidizing agents, cyanides, sulfides, fluorides, phosphides, acetylides, bromides, carbides, silicides, hydroxides, propylene oxide, fluorine, water reactive materials, silver perchlorate, carbon tetrachloride, perchloric acid, 2-aminoethanol, ammonium hydroxide, ethylenediamine, ethyleneimine, oleum, copper and aluminum and their alloys, alkali metals, sulfites.

Hazardous Decomposition or Byproducts: Not available

Hazardous Polymerization May Occur or Will Not Occur? Will Not Occur

Conditions to Avoid:

Section VI – Health Hazard Data

Routes of Entry

Inhalation: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, laryngitis, dyspnea, headache, nausea, and vomiting. Can cause lung damage.

Skin: Can cause severe burns. Severe pain and brownish or yellow stains: usually penetrates the full thickness of the skin. Lesser exposure may cause dermatitis and photosensitization.

Ingestion: Burns in mouth, pharynx and gastrointestinal tract. Weakness from falling blood pressure, nausea, vomiting, dysphagia, abdominal pain, cardiovascular collapse, convulsions, coma and death possible. Asphyxia may occur from edema of the glottis.

Eye: Vapors, liquids and mists are extremely corrosive to the eyes. Brief contact of the vapors will be severely irritating. Brief contact of the liquid or mist will severely damage the eyes and prolonged contact may cause permanent eye injury, which may be followed by blindness.

Carcinogenicity:

NTP:

IARC Monographs:

OSHA Regulated:

Health Hazards: Corrosive! Toxic! Causes severe burns! Risk of serious damage to eyes. Do not breathe vapor. Avoid all contact with the product. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Handle and open container with care. Container should be opened only by a technically qualified person. Solutions are highly corrosive.

Signs and Symptoms of Exposure: Erosion of the teeth, ulceration of the nose, mouth and gums, bronchitis. Repeated or prolonged skin contact can cause severe dermatitis or burns.

Medical Conditions Generally Aggravated by Exposure:

Emergency and First Aid Procedure:

Inhalation – Remove to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician.

Ingestion – If conscious, wash out mouth with water. Have conscious person drink several glasses of water or milk, repeating if vomiting. DO NOT induce vomiting. Aim to dilute acid 100 times approximately. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

Skin – Immediately flush skin with plenty of water for at least 30 minutes while removing contaminated clothing and shoes. Do not use chemical antidotes. Speed is essential. Seek immediate medical attention. Wash contaminated clothing before reuse. Discard contaminated leather articles such as shoes and belt.

Eyes – Immediate first aid is needed to prevent eye damage. Immediately flush eyes with plenty of water for at least 30 minutes holding lids apart to ensure flushing of the entire surface. Speed is essential. Seek medical attention immediately. Do not use chemical antidotes.

Section VII – Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Evacuate and ventilate the area. Cover with soda ash or lime. This will release carbon dioxide, so use caution. Place in a suitable container and mark for disposal. Wash spill site after material pick up is complete. DO NOT empty into drains. DO NOT touch damaged container or spilled materials. Stay upwind: Keep out of low areas.

Waste Disposal Method: According to all applicable regulations. Harmful to aquatic life at high concentrations. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

Precautions to be Taken in Handling and Storing: Store in a cool place away from heated areas, sparks and flames. Store in a well, ventilated area. Store away from incompatible materials. Do not add any other material to the container. Do not wash down the drain. Do not breathe gas/fumes/vapor/spray. In case of sufficient ventilation, wear suitable respiratory equipment. Keep away from direct sunlight or strong incandescent light. Keep container tightly closed and dry. Manipulate under an adequate fume hood. Protect from moisture. Do not use pressure to dispense. May corrode metallic surfaces. Empty containers may contain a hazardous residue. Handle and open container with care. Take off immediately all contaminated clothing. This product must be manipulated by qualified personnel. Do not get in eyes, on skin or on clothing. Wash well after use. In accordance with good storage and handling practices. Do not allow smoking and food consumption while handling. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

Other Precautions:

Section VIII – Control Measures

Respiratory Protection: Dust mask

Ventilation

Local Exhaust: Preferred

Mechanical:

Special:

Other:

Protective Gloves: Impervious (neoprene)

Eye Protection: Face shield and splash goggles

Other Protective Clothing or Equipment: Apron, coveralls and/or other resistant protective clothing as required for workplace conditions to prevent contact with hydrochloric acid solutions.

Work/Hygiene Practices:

Section IX – Additional Information

The information provided in this Material Safety Data Sheet represents data from the manufacturer and/or vendor and is accurate to the best of our knowledge. By providing this information, Delta Education LLC makes no guarantee or warranty, expressed or implied, concerning the safe use, storage, handling, precautions, and/or disposal of the products covered or the accuracy of the information contained in this fact sheet. It is the responsibility of the user to comply with local, state, and federal laws and regulations concerning the safe use, storage, handling, precautions, and/or disposal of products covered in this fact sheet.