

Hydrochloric Acid

Synonyms: Muriatic acid; Chlorohydric acid; Hydrogen chloride in aqueous solution.

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			In case of fire: keep cylinder cool by spraying with water.
EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Corrosive. Burning sensation. Cough. Labored breathing. Shortness of breath. Sore throat. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
•SKIN	ON CONTACT WITH LIQUID: FROSTBITE. Corrosive. Serious skin burns. Pain.	Cold-insulating gloves. Protective clothing.	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
•EYES	Corrosive. Pain. Blurred vision. Severe deep burns.	Safety goggles or eye protection	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION			

CHEMICAL DANGERS: The solution in water is a strong acid, it reacts violently with bases and is corrosive. Reacts violently with oxidants forming toxic gas (chlorine). Attacks many metals in the presence of water forming flammable/explosive gas (hydrogen).

PHYSICAL DANGERS: The gas is heavier than air.

Storage: Separated from combustible and reducing substances, strong oxidants, strong bases, metals keep in a well-ventilated room. Cool. Dry.

Handling, Containment Devices and PPE: Use in exhaust hood with both natural rubber or PVC gloves (if heavy exposure is anticipated contact Safety and Health for other gloves options) and chemical goggles. If a splash hazard to the face is present, a face shield is also required.

Waste Disposal: Collect and store in a glass container labeled with the following "Hazardous Waste – Hydrochloric Acid." Call Safety and Health at x 5069 on the Health Science Campus and x 3600 on the Main Campus for pick up.

Emergency Spill Procedures and Decontamination: Call x77 on the Health Science Campus and x 2600 for Campus Police on the Main Campus.