

Safety Data Sheet

according to WHMIS 2015

Effective date: 16/06/09

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Hydrochloric Acid, 8% v/v

SECTION 1: Identification

Product name: Hydrochloric Acid, 8% v/v

Other means of identification: Aqueous hydrogen chloride, muriatic acid, hydrogen chloride, HCl, chlorohydric acid.

Recommended use and restrictions on use: to reduce pH/alkalinity of water in swimming pool.


Supplier Details:

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Emergency telephone number: Call CANUTEC's 24-hr Number 613-996-6666

SECTION 2: Hazard Identification

Classification of the substance or mixture:

 <p>Corrosion</p>	<ul style="list-style-type: none">• Corrosive to metals (Category 1)• Skin corrosion/irritation - Skin corrosion (Category 1B)• Serious eye damage/eye irritation - Serious eye damage (Category 1)
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Signal word: Danger

Hazard statements:

May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary statements:

Do not breathe mist, vapors, spray.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves, eye protection, protective clothing, face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Keep only in original container.

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Store locked up.

Keep container tightly closed.

Store in corrosive resistant polypropylene container with a resistant inliner.

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

Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Other hazards which do not result in classification: Not identified

SECTION 3: Composition/Information on Ingredients

Chemical Name	CAS No.	Concentration (% wt/wt)
Hydrochloric Acid	7647-01-0	< 3.0

SECTION 4: First Aid Measures

Description of first aid measures:

After inhalation: Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

After skin contact: Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

After eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

After swallowing: Do not induce vomiting. Obtain medical attention.

Most important symptoms and effects, both acute and delayed: May cause skin irritation and/or dermatitis.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing media

Suitable extinguishing agents: Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

For safety reasons, unsuitable extinguishing agents: No information available

Special hazards arising from the substance or mixture: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition. Hydrogen chloride gas Thermal decomposition can lead to release of irritating gases and vapors.

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Advice for firefighters:

Protective equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

Methods and material for containment and cleaning up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and Storage

Precautions for safe handling: Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

SECTION 8: Exposure Controls/Personal Protection

Control Parameters:

Component	Regulation	Type of Listing	Value
Hydrochloric Acid	ACGIH	TLV-C	2 ppm
	OSHA	PEL-T-C	5 ppm (7 mg/m ³)

Appropriate Engineering controls: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Protection of skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Eye protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

General hygienic measures: Handle in accordance with good industrial hygiene and safety practice.

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SECTION 9: Physical and Chemical Properties

Appearance:	Clear liquid	Vapor pressure:	No information available
Odor:	Pungent	Vapor density:	No information available
Odor threshold:	No information available	Relative density/Specific gravity:	1.0 – 1.1
pH - value:	No information available	Solubilities:	Soluble in water
Melting/Freezing point:	0 °C / 32 °F	Partition coefficient (n-octanol / water):	No information available
Boiling point/Boiling range:	100 °C / 212 °F	Auto/Self-ignition temperature:	No information available
Flash point:	Not applicable	Decomposition temperature:	No information available
Evaporation rate:	No information available	Viscosity:	No information available
Flammability:	Not applicable	Molecular formula:	HCl (Hydrochloric acid)
Explosion limit lower:	No information available	Molecular weight:	36.46 g/mol (Hydrochloric acid)
Explosion limit upper:	No information available		

SECTION 10: Stability and Reactivity

Reactivity: None known, based on information available.

Chemical stability: Stable under normal conditions.

Possible hazardous reactions: None under normal processing.

Conditions to avoid: Incompatible products. Excess heat.

Incompatible materials: Metals, oxidizing agents, reducing agents, aldehydes.

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous decomposition products: Hydrogen chloride gas. Thermal decomposition can lead to release of irritating gases and vapors.

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SECTION 11: Toxicological Information

Component	Acute Toxicity	Corrosion Irritation		Sensitization
		Eye	Skin	
Hydrochloric Acid, 8% v/v	Not classified	Causes severe skin burns	Causes serious eye damage	Not classified

Component	Single Target Organ Toxicity (STOT)	Carcinogen	Mutagen	Reproductive Toxicity
Hydrochloric Acid, 8% v/v	Not classified	Not classified	Not classified	Not classified

Symptoms after inhalation: Possible inflammation of the respiratory tract.

Symptoms after skin contact: Caustic burns/corrosion of the skin.

Symptoms after eye contact: Causes serious eye damage.

Symptoms after ingestion: Nausea. Vomiting. Irritation of the gastric/intestinal mucosa. Diarrhea.

Chronic symptoms: Affection/discoloration of the teeth.

Hydrochloric Acid, 37% w/w	
LD 50 oral rat	700 mg/kg
LD 50 dermal rabbit	5010 mg/kg
IARC Group	3

SECTION 12: Ecological Information

Ecotoxicity:

Hydrochloric Acid, 37% w/w	
LC50 fishes 1	282 mg/l (96 h; Gambusia affinis; PURE SUBSTANCE)
EC50 Daphnia 1	< 56 mg/l (72 h; Daphnia magna; PURE SUBSTANCE)
LC50 fish 2	862 mg/l (Leuciscus idus; PURE SUBSTANCE)
TLM fish 1	282 ppm (96 h; Gambusia affinis; PURE SUBSTANCE)

Persistence and degradability: Soluble in water. Persistence is unlikely based on information available.

Bioaccumulative potential: No information available.

Mobility in soil: Will likely be mobile in the environment due to its water solubility.

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Other information: Avoid release to the environment

SECTION 13: Disposal Considerations

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations including the Canadian Environmental Protection Act. Avoid release to the environment.

SECTION 14: Transport Information

UN Number: 1789

UN proper shipping name: Hydrochloric Acid

Transport hazard class: 8 – Corrosive Material

Packing group: II – Medium Danger

Environmental hazard: Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

SECTION 15: Regulatory Information

United States

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TSCA	Listed
RQ (Reportable quantity, Section 304 EPA)	5000 lb
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Pennsylvania	RTK (Right to Know) List
New Jersey	Right to Know Hazardous Substance List
Massachusetts	Right To Know List

Canada

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Domestic Substances List (DSL)	Listed
Canadian Ingredient Disclosure List	Listed

SECTION 16: Other Information

YXELABS Incorporated provides the information contained herein in good faith but makes no representation as to its completeness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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Abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service

EPA: Environmental Protection Agency

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IARC: International Agency for Research on Cancer

NIOSH/MSHA: National Institute for Occupational Safety and Health/Mine Safety and Health Administration

OSHA: Occupational Safety and Health Administration

SARA: Superfund Amendments and Reauthorization Act

TDG: Transportation of Dangerous Goods

TSCA: Toxic Substances Control Act

WHMIS: Workplace Hazardous Materials Information System

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