

MATERIAL SAFETY DATA SHEET

CONTROLLED DOCUMENT



1. Chemical Product and Company Identification

Slack Chemical Company, Inc.
 465 S. Clinton St.
 Carthage, NY 13619
 (315) 493-0430

Chemical Name
 Mineral acid/inorganic acid

Synonyms
 Muriatic acid, hydrogen chloride, HCl

24 Hour Emergency Number
~~XXXXXXXXXXXX~~

Product Name
~~XXXXXXXXXXXX~~

2. Hazards Identification

Emergency Overview

DANGER! Corrosive - Causes severe burns to eyes and skin. Severely irritating to the respiratory tract and mucous membranes. Harmful or fatal if inhaled. Causes severe burns of the digestive tract. Harmful or fatal if swallowed. Never add water to product. Always add the product to large quantities of water. Environmental Hazard - This product is toxic to fish. Keep out of lakes, streams, ponds, or other waters.

Precautions

Do not get in eyes, on skin, or on clothing. This product is corrosive and can cause severe burns. It can cause severe irritation and/or burns to the skin. Even small amounts splashed into the eyes can cause blindness. Do not breathe mist or vapors. Vapor may cause severe irritation of nasal and respiratory tract. Use only with adequate ventilation. Ventilation must be sufficient to limit employee exposure to this product below permissible exposure limits. Do not swallow. Swallowing can cause severe internal burns and may be fatal. Wash thoroughly every day after work. Remove and wash contaminated clothing before reuse. Do not eat, drink or smoke in work area.

3. Composition/Information on Ingredients

Component	CAS#	%Wt/Wt
Hydrochloric Acid	XXXXXXXXXX	15 - 35
Water	7732-18-5	Balance

4. First Aid Measures

Ingestion

Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

Skin

Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

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Eyes

Remove contact lenses and pour a gentle stream of warm water through the affected eye for at least 15 minutes. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

Inhalation

Remove from area to fresh air. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

5. Fire Fighting Measures

Flammable Properties

None.

Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

Fire-Fighting Procedures

Emits toxic fumes under fire conditions. Fire-fighters must wear NIOSH approved pressure demand, self-contained breathing apparatus and full protective clothing when fighting chemical fires. Contact with most metals can rapidly generate hydrogen, which is explosive.

6. Accidental Release Measures

Personal Precautions

Unprotected personnel should move upwind of spill. Only personnel equipped with proper respiratory and eye/skin protection should be permitted in the area.

Methods for Clean-Up

Dike area to contain spill. Dilute spill with large amounts of water then neutralize with dilute caustic or soda ash. Use a vacuum truck to pick up neutralized material for proper disposal. Properly neutralized liquid residues may be disposed of in waste water treatment facilities which allow the discharge of neutral salt solutions. After all visible traces have been removed, flush area with large amounts of water.

7. Handling and Storage

Handling Procedures

Do not use in poorly ventilated or confined spaces without proper respiratory protection. Wear appropriate personal protective equipment when handling this product. Wear respiratory protection whenever exposure to vapor is likely. Prevent acid from contacting strong alkalis or metals. Add compound slowly to water, never water to compound.

Storage Procedures

Store in a cool, dry, well-ventilated place. Store only in closed, properly labeled containers. Keep container closed when not in use. When opening container, loosen closure slowly and carefully to relieve possible internal pressure or preferably, utilize a safety relief valve where available. Bulk storage tanks should be constructed of corrosion resistant materials such as rubber- or glass-lined steel, fiberglass, or plastic and should be vented to a scrubber to remove acid fumes. Bulk storage tanks should contain a dike sufficiently large enough to contain entire contents.

8. Exposure Controls/Personal Protection

Exposure Guidelines

Hydrochloric Acid:

Ceiling: 5 ppm (OSHA)

Ceiling: 2 ppm (ACGIH)

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Engineering Controls

Use local exhaust or general room/dilution ventilation sufficient to maintain employee exposure below permissible exposure limits.

Personal Protective Equipment

Eyes/Face

Wear chemical goggles and face shield.

Skin

Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.

Respiratory

Where ventilation is inadequate, use a regulatory compliant full face-piece air purifying respirator with the appropriate chemical cartridges or positive-pressure, air supplied respirator. Carefully read and follow the respirator manufacturer's instructions and information.

9. Physical & Chemical Properties

<i>State</i>	Liquid
<i>Appearance</i>	Clear, colorless to slight yellow
<i>Odor</i>	Pungent
<i>pH</i>	< 1
<i>Freezing Point</i>	-43°C
<i>Boiling Point</i>	108°C (Azeotrope 20.2% HCl)
<i>Vapor Pressure</i>	13 - 24 mmHg
<i>Specific Gravity, 20°C</i>	1.07 - 1.17
<i>Vapor Density</i>	1.267 (Air = 1)
<i>Solubility (Water)</i>	Complete
<i>Flammability</i>	Not flammable
<i>Flash Point</i>	N/A
<i>Upper/Lower Flammability</i>	N/A
<i>Auto Ignition Temperature</i>	N/A
<i>Decomposition Temperature</i>	N/A

10. Chemical Stability & Reactivity Information

Stability

This product is stable under normal conditions.

Conditions to Avoid

Incompatible materials, extreme heat.

Incompatible Materials

Strong alkalis, metals

Hazardous Decomposition Products

Chlorine. Flammable explosive hydrogen may be evolved from contact with metals.

Polymerization

Will not occur.

11. Toxicological Information

Component Analysis

Hydrochloric Acid:	Inhalation (LC ₅₀)	3,124 ppm [Rat]
	Dermal (LD ₅₀)	>5,010 mg/kg [Rabbit]
	Oral (LD ₅₀)	900 mg/kg [Rabbit]

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Carcinogenic effects

This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, ACGIH, or OSHA.

Acute Potential Health Effects

Inhalation: Hydrochloric acid mists or hydrogen chloride vapors are severely irritating to the respiratory tract and mucous membranes. Inhalation of sufficiently high concentrations may result in laryngeal spasms and/or edema, and lead to rapidly developing pulmonary edema. Mists may also cause bleeding of the nose and gum, ulceration of the nasal and oral mucosa, and severe skin and eye irritation. Eye/skin: Hydrochloric acid is corrosive to the eyes and skin. Direct eye contact can result in blindness even after a short exposure to small amounts. Ingestion: Ingestion of hydrochloric acid causes severe burns of the digestive tract because of its corrosive nature and may be fatal.

Chronic Potential Health Effects

The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.

12. Ecological Information

Ecotoxicity

Hydrochloric Acid:

Trout	- 10 ppm (LC ₁₀₀ - 24hr)
Bluegill	- 3.6 ppm (LC ₅₀ - 48hr)
Salt water shrimp	- 100-330 ppm (LC ₅₀ - 48hr)
Starfish	- 100-330 ppm (LC ₅₀ - 48hr)

Mobility

Completely soluble.

13. Disposal Considerations

Disposal Instructions

- Waste material must be disposed of in accordance with federal, state, provincial, and local regulations.
- Empty containers should be recycled or disposed of through an approved waste management facility.
- Slack Chemical Co., Inc. recommends disposal of dry residues in an approved hazardous waste management facility or by neutralizing and disposing of according to local or permitted regulations.

14. Transport Information

Shipping Description

UN 1825

Proper Shipping Name: Hydrochloric Acid

Hazard Class: 8

Packing Group: II

Label: Corrosive

RQ: 5,000 lb

15. Regulatory Information

<p>Component</p> <p>TSCA Inventory</p> <p>CERCLA RQ</p> <p>OSHA 29 CFR 1910.1200 Hazard Communication</p> <p>EPCRA Section 302 Extremely Hazardous Substances TPQ</p> <p>EPCRA Section 304 Extremely Hazardous Substances RQ</p> <p>EPCRA Section 313 Toxic Chemicals</p> <p>Safe Drinking Water Act - CCL</p>	<p>Hydrochloric Acid (7647-01-0)</p> <p>Yes</p> <p>Yes (5,000 lb)</p> <p>Yes</p> <p>No (Hydrogen chloride)</p> <p>No (Hydrogen chloride)</p> <p>No (Hydrogen chloride)</p> <p>No</p>
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CAA 112(r) TQ
 California Proposition 65
 Canada DSL
 Canada WHMIS

No
 No***
 Yes
 D1A, D2B, E

***This product is not listed, but it may contain elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65.

16. Other Information

ENVIRONMENTAL	3	ENVIRONMENTAL	3
Health	3	Health	3
Flammability	0	Flammability	0
Reactivity	1	Reactivity	1
Pers. Prot.	X	Special Hazards	COR

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