

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: **Hydrochloric Acid 1.0N**
OTHER MEANS OF IDENTIFICATION: None
RECOMMENDED USE: Laboratory reagent
RESTRICTIONS ON USE: None
SUPPLIER IDENTIFIER: **Di-Corp**
8750-53 Ave
Edmonton, AB T6E 5G2
780-440-4923
EMERGENCY PHONE NUMBER: 780-468-4064 (24 hr)
EMERGENCY TRANSPORT NUMBER: 1-888-CANUTEC (226-8832), 613-996-6666 or *666 on a cellular phone

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Corrosive to metals – Category 1
Skin Corrosion / Irritation – Category 2
Serious Eye Damage / Eye Irritation – Category 1

LABEL SYMBOLS:



SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

May be corrosive to metals.
Causes skin irritation.
Causes serious eye damage.

PRECAUTIONARY STATEMENTS:

Prevention
Keep only in original container.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Response
IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
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/doctor.
Absorb spillage to prevent material damage.

OTHER HAZARDS:

Storage
Store in corrosion resistant container.
None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Hydrochloric acid	7647-01-0	8 - 10% (v/v)

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Immediately flush with copious amounts of running water while removing contaminated clothing. Continue flushing until irritation subsides. If irritation persists, or burns develop, obtain medical attention.

EYE CONTACT:	Immediately flush with gently flowing warm water for 15 minutes holding eyelids open. Remove contact lens, if present. Neutral saline may be used as soon as it is available. Obtain medical attention when flushing period is complete and no further irritation is felt.
INGESTION:	Do not induce vomiting. If victim is conscious and alert, rinse mouth with water. Obtain immediate medical attention. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	Move to fresh air. Apply oxygen or artificial respiration if required. Obtain immediate medical attention.
MOST IMPORTANT SYMPTOMS / EFFECTS:	Product is a corrosive material. May cause eye and skin irritation.
IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT:	Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use media suitable for surrounding fire.
UNSUITABLE EXTINGUISHING MEDIA:	None known.
SPECIFIC FIRE HAZARDS:	May give off toxic hydrogen chloride fumes in a fire.
HAZARDOUS COMBUSTION PRODUCTS:	Hydrogen chloride.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Full protective equipment and self-contained breathing apparatus required for fire-fighting personnel. Remove containers from fire area, or cool with water spray, if possible.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Always use suggested or required safety equipment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Cover spill with soda ash or lime; use caution to avoid splashing. Soak up liquid with absorbent material (moist towels for small lab spills) and place in suitable containers approved for material being disposed. Wash spill site thoroughly after material pick up is complete.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

This is a dilute hydrochloric acid solution, but should still be handled with care. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact. Do not wear contact lenses when handling; hydrogen chloride fumes can collect on the eye behind the contact lens causing severe burns. Avoid ingestion. Wash thoroughly after handling. Launder contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in cool, dry place away from incompatible materials. Keep containers tightly closed when not in use. Empty containers contain residual hazardous material, and must be handled and stored as if full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	Hydrochloric acid: ACGIH TWA = 2 ppm ceiling
ENGINEERING CONTROLS:	General mechanical sufficient for normal use. Use process enclosure, local exhaust ventilation or other engineering controls if vapours or mists are generated during use.
	PERSONAL PROTECTIVE MEASURES
RESPIRATORY PROTECTION:	None required for this solution. Use NIOSH approved respirator with acid gas/mist cartridges if vapours or mists are generated.
PROTECTIVE GLOVES:	Suggest rubber or latex gloves be worn.
EYE PROTECTION:	Suggest chemical splash goggles. Do not wear contact lenses when working with corrosives.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Suggest the use of a chemical apron and/or chemical resistant clothing. Ensure eye-wash station and emergency shower are available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear colourless liquid
ODOUR:	Mild HCl odour
ODOUR THRESHOLD:	Not determined
pH:	0.7
MELTING POINT / FREEZING POINT:	0°C
BOILING POINT / RANGE:	100°C
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not available
FLAMMABILITY:	Not applicable
FLAMMABILITY / EXPLOSIVE LIMITS:	Not applicable
VAPOUR PRESSURE:	Not available
VAPOUR DENSITY:	Not available
RELATIVE DENSITY:	1.0
SOLUBILITY:	Miscible in water
PARTITION COEFFICIENT:	Not available
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not available
VISCOSITY:	Not available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	No information available
CHEMICAL STABILITY:	Stable under normal conditions
POSSIBILITY OF HAZARDOUS REACTIONS:	Polymerization will not occur
CONDITIONS TO AVOID:	Avoid incompatible materials. Avoid excess heat.
INCOMPATIBLE MATERIALS:	Metals. Reducing agents. Bases. Water reactive materials. Aldehydes.
HAZARDOUS DECOMPOSITION PRODUCTS:	Reacts with metals to produce hydrogen. Hydrogen chloride gas.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	LD50 (oral) >2000 mg/kg (ATE calculated)
	LD50 (dermal) > 2000 mg/kg (ATE calculated)
	LC50 (inhalation) > 20 mg/L (ATE calculated)

COMPONENT TOXICITY

COMPONENT	LD50 ORAL	LD50 DERMAL	LC50 INHALATION
Hydrochloric acid	238 - 277 mg/kg (rat)	>5010 mg/kg (rabbit)	1.68 mg/L/1hr (rat)

SKIN CONTACT:	May cause irritation or burning. Prolonged contact may result in chemical burns. Prolonged or repeated contact may cause dermatitis.
EYE CONTACT:	Causes severe eye irritation. Without immediate first aid permanent eye damage can result.
INGESTION:	Burning in mouth and throat, and pharynx and gastrointestinal tract. Large amounts may lead to abdominal pain and vomiting.
INHALATION:	Hydrochloric acid solutions can readily release high concentrations of hydrogen chloride gas, which is very toxic and corrosive and poses a serious inhalation hazard.
CARCINOGENICITY:	Not considered as carcinogenic by IARC, ACGIH or NTP.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.

MUTAGENICITY: No information available.
 CHRONIC TOXICITY: No information available.
 TARGET ORGAN EFFECTS: No information available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: No product information available.

COMPONENT	LC50 (gambusia affinis)	EC50 (daphnia)	EC50 (algae)
Hydrochloric acid	282 mg/L/96hr	56 mg/L/72hr	Not available

PERSISTENCE AND DEGRADABILITY: Not applicable to inorganics materials.
 BIOACCUMULATIVE POTENTIAL: Not available.
 MOBILITY IN SOIL: Not available.
 OTHER ADVERSE EFFECTS: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with all federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Rinse empty containers thoroughly before discarding.

SECTION 14: TRANSPORTATION INFORMATION

TDG: Regulated*
 DOT: Regulated
 IATA: Regulated
 IMDG: Regulated
 UN NUMBER: UN1789
 PROPER SHIPPING NAME: Hydrochloric acid, solution
 CLASS: 8
 PACKING GROUP: III
 IMDG HAZARDS: Not available
 BULK TRANSPORT: Not applicable
 SPECIAL PRECAUTIONS: Not available

*NOTE: Lab reagent size product can be shipped as a LIMITED QUANTITY.

SECTION 15: REGULATORY INFORMATION

DSL: All ingredients are listed on the DSL.
 WHMIS CLASS: D1A, E
 TSCA: All ingredients are listed or exempt from listing.

SECTION 16: OTHER INFORMATION

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