

MATERIAL SAFETY DATA SHEET

ALDON CORPORATION

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MSDS No. HH 90  
Effective Date July 1, 1986

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	HYDROCHLORIC ACID 1.0N & 0.1N
Chemical Synonyms	Hydrochloric Acid, 1.0 & 0.1 Normal Soln.
Formula	HClH <sub>2</sub> O
Unit(s) Size	1.4 Liters
C.A.S. No.	7647-01-0

800-424-9300  
Day 716-226-6177  
Night 716-334-4222

HEALTH 2  
FIRE 0  
REACTIVITY 2

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Hydrochloric Acid, 1.0 and 0.1 Normal Solution	3.6-0.36%	See Section V.

WARNING! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION TO MUCCOUS MEMBRANES.

SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes: Approx. 0°C (32°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; may have acid odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
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Extinguisher Media Use any media suitable for extinguishing supporting fire.

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Non-combustible, but contact with common metals produce hydrogen which may form explosive mixtures with air.

D.O.T. HYDROCHLORIC ACID, CORROSIVE MATERIAL, UN1789, ORM-D, 15% OR LESS

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

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SECTION V HEALTH HAZARD DATA

Threshold Limited Value

Hydrogen chloride as gas or fume: TWA Ceiling Limits.  
TWA: 5 ppm; 7 mg/m<sup>3</sup> (AIR). (ACGIH 1983-84).

Effects of Overexposure

Hydrochloric acid solutions at these dilutions are not skin or eye irritant, but may be irritant to mucous membranes. **INGESTION:** May be harmful if swallowed.

Emergency and First Aid Procedures

**INGESTION:** If swallowed, if conscious, give several glasses of water or milk to drink. Do NOT induce vomiting. Call physician immediately. Never give anything by mouth to an unconscious person. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush with water. **INHALATION:** Remove to fresh air. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperatures or heat.
Incompatibility (Materials to Avoid)	Stable	X	Will react with most metals, alkalies, strong oxidants.

Hazardous Decomposition Products

Hydrogen chloride gas may be evolved by heating. Hydrogen gas evolved by reaction with metals.

Hazardous Polymerization	May Occur	Conditions to Avoid	Not applicable.
	Will Not Occur	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Carefully neutralize with sodium bicarbonate and flush to sewer with copious amounts of water.

Waste Disposal Method

Carefully neutralize with sodium bicarbonate, soda ash, or lime and flush to sewer with copious amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection None needed in normal laboratory handling. In misty conditions work in ventilation hood (Specify Type)

Ventilation	Local Exhaust	None needed.	Special	No.
Protective Gloves	Mechanical (General)	None needed.	Other	No.

Other Protective Equipment Smock, apron, eye wash station, goggles, ventilation hood, proper gloves.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool place.  
Wash thoroughly after handling.

Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals.

Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. No. 2	Date 5/23/91	Approved Alexander A. Picchilli	Chemical Safety Coordinator	AP
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