



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.  
Avon, New York 14414  
(716) 226-6177

MSDS No. HH 95  
Effective Date May 7, 1998

## SECTION V HEALTH HAZARD DATA

HH 95

**Threshold Limited Value** Hydrogen chloride as gas or fume: TWA Ceiling Limits.  
TWA: 5 ppm; 7.5 mg/m<sup>3</sup> (AIR). (ACGIH 1992-93).

**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 medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **INHALATION:** Remove to fresh air. If illness or discomfort develops, get medical attention.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Excessive temperatures or heat.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Will react with most metals, alkalis, strong oxidants.

**Hazardous Decomposition Products** Hydrogen chloride gas maybe evolved by heating. Hydrogen gas evolved by reaction with metals.

<b>Hazardous Polymerization</b>	<b>Conditions to Avoid</b>		Not applicable.
	<b>May Occur</b>	<b>Will Not Occur</b>	
		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** Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.  
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 (Specify Type)** None needed in normal laboratory handling. In misty conditions work in ventilation hood or wear NIOSH/MSHA-approved respirator.

<b>Ventilation</b>	<b>Local Exhaust</b>	None needed.	<b>Special</b>	No.
	<b>Mechanical (General)</b>	None needed.	<b>Other</b>	No.

**Protective Gloves** Rubber. **Eye Protection** Chemical safety glasses.

**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.  
Keep container tightly closed when not in use.

**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.

<b>Revision</b> No. 1	<b>Date</b> 5/7/98	<b>Approved</b> Michael Raszeja	<b>Chemical Safety Coordinator</b> MR
-----------------------	--------------------	---------------------------------	---------------------------------------

The information contained herein is furnished without warranty of any kind. Employees should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	HYDROCHLORIC ACID, 2M (2N) SOL'N	 <b>CHEMTREC</b> <b>800-424-9300</b> Day 716-226-6177  <b>NFPA HAZARD RATING</b> LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4  <b>HMIS *</b> 0 1 2 3 4
<b>Chemical Synonyms</b>	Hydrochloric Acid, 2 Molar (2 Normal)	
<b>Formula</b>	Mixture. See Section II.	
<b>Unit Size</b>	up to 4 Lt.	
<b>C.A.S. No.</b>	Mixture. See Section II.	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Hydrochloric Acid: (CAS No. 7647-01-0)	3.64%	See Section V.
Water: (CAS No. 7732-18-5)	96.36%	None established.

**CAUTION! MAY BE HARMFUL IF SWALLOWED. CONTACT MAY**

**CAUSE IRRITATION TO SKIN, EYES AND MUCOUS MEMBRANES.**

## SECTION III PHYSICAL DATA

<b>Melting Point (°F)</b>	Freezes: Approx. 0°C (32°F)	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	1.0
<b>Boiling Point (°F)</b>	Approx. 100°C (212°F)	<b>Percent Volatile by Volume (%)</b>	96.36%
<b>Vapor Pressure (mm Hg)</b>	14 (water)	<b>Evaporation Rate (Water = 1)</b>	Greater than 1.
<b>Vapor Density (Air=1)</b>	0.7 (water)		
<b>Solubility in Water</b>	Complete.		
<b>Appearance &amp; Odor</b>	Clear, colorless liquid; may have acrid odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-flammable.	<b>Flammable Limits in Air % by Volume</b>	N/A	<b>Lower</b>	<b>Upper</b>
----------------------------------	----------------	--	-----	--------------	--------------

**Extinguisher Media** Use any media suitable for extinguishing supporting fire.

### SPECIAL FIREFIGHTING PROCEDURES

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

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 157)

### 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, SOLUTION, 8, UN 1789, PG II

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