



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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MSDS No. TT 203
Effective Date January 8, 1997

SECTION V HEALTH HAZARD DATA

TT 203

Threshold Limited Value

RTECS No. AJ7875000 Toxicity data: Orl-mus LD50 5640 mg/kg, ipr-mus LDLo 500 mg/kg. TWA: 1 ppm; 6.7 mg/m³ (ACGIH 1992-93).

Effects of Overexposure

Ingestion may be fatal. A corrosive organic acid which rapidly penetrates and "fixes" tissue. Systemic effects are presumably secondary to gastrointestinal damage and to acidosis. Headache, nausea, dizziness, fatigue, weakness, coughing, chest pains. May cause severe irritation or burns to skin, eyes, mouth and stomach.

Emergency and First Aid Procedures

SKIN: Flush thoroughly with water. Follow by irrigating exposed area with a sodium carbonate solution. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get immediate medical attention. **INGESTION:** If swallowed, do NOT induce vomiting. If conscious, drink large quantities of water. Follow with milk of magnesia, beaten eggs, or vegetable oil. Call physician immediately. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Very hygroscopic. Decomposed by heating with caustic alkalis. Avoid storing water solutions at concentrations below 30%. Decomposes on heating above 200°C.
	Stable	X	

Incompatibility (Materials to Avoid)	Attacks metals.
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Hazardous Decomposition Products	Chloroform, hydrochloric acid, carbon dioxide, phosgene and carbon monoxide.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Wearing proper protective clothing, avoid making dust, sweep up and place in a suitable container for disposal. Flush area with water.
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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.
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Neutralize with sodium bicarbonate and flush to sewer with copious amounts of water or dispose of in an approved incinerator equipped with an afterburner and scrubber.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. Should acid vapors occur, work in ventilation hood or wear a NIOSH/MSHA-approved chemical cartridge mask for acid vapors.
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Ventilation	Local Exhaust	Yes.	Special	No.
	Mechanical (General)	Yes.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Lab coat, goggles, apron, proper gloves, ventilation hood, eye wash station.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Keep container tightly closed and store in a cool, dry place. If stored for a long time, acid may cake. Very hygroscopic. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Avoid eye and skin contact. Do not take internally. Use adequate ventilation. Remove and wash contaminated clothing.


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

Revision	No. 1	Date	1/08/97	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers 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

Product	TRICHLOROACETIC ACID, 5% SOLUTION				
Chemical Synonyms	Trichloroacetic Acid, 5% Aqueous Solution				
Formula	Mixture.				
Unit Size	up to 4 Lt.				
C.A.S. No.	Mixture.				



CHEMTREC

800-424-9300

Day 716-226-6177

NFPA

HAZARD RATING

LEAST SLIGHT MODERATE HIGH EXTREME

0 1 2 3 4

Health	3
Fire	0
Reactivity	1

HMIS *

HIGH EXTREME

3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
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Trichloroacetic Acid: (CAS No. 76-03-9)	5%	6.7 mg/m ³ = 1 ppm
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Water: (CAS No. 7732-18-5)	95%	
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DANGEROUS! HIGHLY CORROSIVE! HYGROSCOPIC. HARMFUL IF SWALLOWED OR INHALED.		
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CAUSES SEVERE BURNS. AVOID CONTACT WITH SKIN AND EYES.		
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SECTION III PHYSICAL DATA

Melting Point (°F)	Approx. 0°C (32°F)	Specific Gravity (H ₂ O = 1)	Approx. 1.0
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Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	95%
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Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	< 1
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Vapor Density (Air=1)	0.7 (water)		
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Solubility in Water	Complete.		
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Appearance & Odor	Clear, colorless liquid; sharp odor.		
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SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
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Extinguisher Media	Water; alcohol foam; carbon dioxide (CO ₂); dry chemical.
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SPECIAL FIREFIGHTING PROCEDURES

Water in a straight hose stream will scatter and spread fire and should not be used. Use water spray to cool container. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

(1993 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.6, GUIDE PAGE NO. 59)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Can react vigorously with strong oxidizing materials. In fire conditions emits highly toxic fumes of hydrogen chloride when heated above 200°C (392°F).

D.O.T. TRICHLOROACETIC ACID, SOLUTION, 8, UN 2564, PG II

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