



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.  
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MSDS No. TT 205  
Effective Date May 24, 1999

## SECTION V HEALTH HAZARD DATA

TT 205

### Threshold Limited Value

RTECS No. AJ7875000 Toxicity data: Orl-mus LD50 5640 mg/kg, ipr-mus LDLo 500 mg/kg. TWA: 1 ppm; 5 mg/m<sup>3</sup> (ACGIH 1992-93).

### Effects of Overexposure

Target organs affected: Respiratory/gastrointestinal system. 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	Decomposed by heating with caustic alkalis. Avoid storing water solutions at concentrations below 30%. Decomposes on heating above 200°C.
	Stable		

Incompatibility (Materials to Avoid)	Strong bases. Heating with Alkali yields chloroform and alkali carbonate. Alkali solutions in water can react with metals to liberate Hydrogen gas.
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Hazardous Decomposition Products	Chloroform, hydrogen chloride, carbon dioxide 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	Ventilate area. Wearing proper protective clothing, avoid making dust, neutralize with sodium bicarbonate sweep up and place in a suitable container for disposal. Flush area with soap and 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 place in container for disposal and place 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. Solutions are acidic. 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. 4	Date		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 5/24/99 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
Chemical Synonyms	Trichloroethanoic acid
Formula	CCl <sub>3</sub> COOH
Unit Size	up to 2.5 Kg.
C.A.S. No.	76-03-9

**CHEMTREC**  
800-424-9300  
Day 716-226-6177

**NFPA HAZARD RATING**

LEAST	SLIGHT	MODERATE	HIGH	EXTREME
0	1	2	3	4

**HMIS \***

Health	3
Fire	1
Reactivity	1

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Trichloroacetic Acid	98+%	5 mg/m <sup>3</sup> = 1 ppm
<b>DANGER! HIGHLY CORROSIVE!</b>		
<b>HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE</b>		
<b>BURNS. AVOID CONTACT WITH SKIN AND EYES.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	54-58°C (129-136°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.6298 at 61°/4°C
Boiling Point (°F)	196°C (384°F)	Percent Volatile by Volume (%)	Negligible as solid.
Vapor Pressure (mm Hg)	1 mm at 51.0°C	Evaporation Rate (Butyl Acetate =1)	Slower than ether.
Vapor Density (Air=1)	5.6		
Solubility in Water	Complete.		
Appearance & Odor	White deliquescent crystalline solid; characteristic acidic odor. Hygroscopic.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

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

### 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.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 153)

### 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, 8, UN 1839, PG II

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