



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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(716) 226-6177

MSDS No. FF 100  
Effective Date November, 4, 1998

## SECTION V HEALTH HAZARD DATA

FF 100

**Threshold Limited Value** None established for this material. 1 mg/m<sup>3</sup> as iron (ACGIH 1992-93) 2mg (Fe)/m<sup>3</sup> (STEL); OSHA (PEL) 1mg (Fe)/m<sup>3</sup> ppm (TWA). LD50: 1160 mg/kg (rat).

**Effects of Overexposure** Corrosive to body tissues. **INHALATION:** Dust may cause upper respiratory tract irritation and inflammation of the lungs. **EYES:** Causes irritation and/or burns. **SKIN:** Causes irritation. Prolonged contact may result in burns. **INGESTION:** Harmful if swallowed. May cause severe gastric irritation, ulceration, including nausea, vomiting, pain.

**Emergency and First Aid Procedures**  
**INHALATION:** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. Get medical attention. **INGESTION:** If swallowed, do NOT induce vomiting. If conscious, give one or two glasses of water to drink, then egg whites. Get immediate medical attention. Never give anything by mouth to an unconscious person.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Avoid moisture. Very hygroscopic.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Strong reducing agents. Metals, allyl chloride, sodium potassium.

**Hazardous Decomposition Products** Produces Hydrochloric acid fumes on exposure to moisture or light. Chlorine compounds released at temperatures > 200°C.

<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** Recover for use if not contaminated. Wearing proper safety equipment and good ventilation. Sweep up and place in a suitable container for proper disposal. Wash spill area with soap and 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. Dispose of in an approved incinerator or contract with a licensed waste disposal agency.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** None should be needed in normal laboratory handling. If dusty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA approved respirator.

<b>Ventilation</b>	<b>Local Exhaust</b>	<b>Recommended.</b>	<b>Special</b>	<b>No.</b>
	<b>Mechanical (General)</b>	<b>Recommended.</b>	<b>Other</b>	<b>No.</b>

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

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

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Isolate from oxidizing materials. Store in a cool, dry place and protect from light and moisture. Wash thoroughly after handling. Shelf life of 6 months.  
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. Avoid contact with skin, eyes and mucous membranes. Avoid breathing dust. Remove and wash contaminated clothing. Highly deliquescent.

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

<b>Revision</b> No. 5	<b>Date</b> 11/4/98	<b>Approved</b> Michael Raszeja	<b>Chemical Safety Coordinator</b> 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

<b>Product</b>	FERRIC CHLORIDE, ANHYDROUS	 <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> HEALTH FIRE REACTIVITY 2 0 1
<b>Chemical Synonyms</b>	Iron (III) Chloride, Anhydrous	
<b>Formula</b>	FeCl <sub>3</sub>	
<b>Unit Size</b>	up to 2.5 Kg.	
<b>C.A.S. No.</b>	7705-08-0	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ferric Chloride, Anhydrous.	100%	See Section V.
<b>DANGER! CORROSIVE! CAUSES SEVERE BURNS.</b>		
<b>HARMFUL IF SWALLOWED. (Very Hygroscopic).</b>		

## SECTION III PHYSICAL DATA

<b>Melting Point (°F)</b>	Decomp. 306°C (583°F).	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	2.804 at 11°C.
<b>Boiling Point (°F)</b>	319.0°C (599°F).	<b>Percent Volatile by Volume (%)</b>	Non-volatile (NA).
<b>Vapor Pressure (mm Hg)</b>	1 mm @ 194.0°C.	<b>Evaporation Rate ( =1)</b>	Non-volatile (NA).
<b>Vapor Density (Air=1)</b>	Data not listed.		
<b>Solubility in Water</b>	Readily soluble in water. 80 grams per 100 mls at 20°C (68°F).		
<b>Appearance &amp; Odor</b>	Dark to black crystalline powder; slight pungent odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-combustible (NA).	<b>Flammable Limits in Air % by Volume</b>	NA	<b>Lower</b>	<b>Upper</b>
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**Extinguisher Media** Carbon dioxide, CO<sub>2</sub>, dry chemical. Avoid use of water.

## 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

Explodes at 538°C. Explodes upon contact with cyanides. Dissociates at high temperatures to form Ferrous Chloride and toxic and corrosive chlorine gas. Liberates hydrochloric acid fumes when damp.

D.O.T. FERRIC CHLORIDE, ANHYDROUS, 8, UN 1773, PG III

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