



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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

MSDS No. ZZ 80  
Effective Date October 15, 1998

## SECTION V HEALTH HAZARD DATA

ZZ 80

**Threshold Limited Value** As Zinc oxide 5 mg/m<sup>3</sup> (ACGIH-TLV 1992-93). As Zinc metal fume: 5 mg/m<sup>3</sup> (OSHA-PEL), 10 mg/m<sup>3</sup> (ACGIH STEL).

**Effects of Overexposure**  
**INHALATION:** Prolonged inhalation of dust may cause irritation, tightness or pain in chest, coughing and difficulty breathing. **EYES:** May cause transient irritation. **SKIN:** May cause irritation. Possible burning of skin. **INGESTION:** May be harmful if swallowed. May cause nausea, vomiting, headache, dizziness and gastrointestinal irritation.

**Emergency and First Aid Procedures**  
**INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink. Induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention. **INHALATION:** Remove to fresh air. If symptoms of illness develop, get medical attention.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Thermally unstable and decomposes to the oxide at elevated temperatures. Shock, friction or heat.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Combustible materials, reducing agents, strong acids. Organic materials and strong bases. Metal powders.

**Hazardous Decomposition Products** Oxides of Nitrogen, oxides of Zinc.

<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. Sweep up and place in a suitable container. Do not allow to remain in contact with combustibles. Flush spill area with 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 chemical landfill or contract with a licensed waste disposal service.

## SECTION VIII SPECIAL PROTECTION INFORMATION

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

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

<b>Protective Gloves</b>	Rubber.	<b>Eye Protection</b>	Chemical safety glasses.
--------------------------	---------	-----------------------	--------------------------

**Other Protective Equipment** Goggles, smock, apron, eye wash station, proper gloves, fire extinguisher, ventilation hood.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store in a cool, dry place below 85°F because of its tendency to melt and cake. Store away from combustible and flammable materials, out of direct sunlight. 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.

Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use with adequate ventilation. 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. 4	<b>Date</b> 10/15/98	<b>Approved</b> Michael Raszeja	<b>Chemical Safety Coordinator</b> MR
-----------------------	----------------------	---------------------------------	---------------------------------------

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>	ZINC NITRATE	 <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>	Nitrate Acid, Zinc Salt	
<b>Formula</b>	(a) Zn(NO <sub>3</sub> ) <sub>2</sub> ·6H <sub>2</sub> O (b) Zn(NO <sub>3</sub> ) <sub>2</sub> ·nH <sub>2</sub> O	
<b>Unit Size</b>	up to 2.5 Kg.	
<b>C.A.S. No.</b>	(a) 10196-18-6 (b) 13778-30-8	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Zinc Nitrate	100%	See Section V.
<b>DANGER! STRONG OXIDIZER! CONTACT WITH OTHER</b>		
<b>MATERIAL MAY CAUSE FIRE. MAY CAUSE EYE OR</b>		
<b>SKIN IRRITATION. HARMFUL IF SWALLOWED.</b>		

## SECTION III PHYSICAL DATA

<b>Melting Point (°F)</b>	Approx. 36.4°C (97°F)	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	2.065 at 14°C
<b>Boiling Point (°F)</b>	-6H <sub>2</sub> O at 105-131°C (221-267°F)	<b>Percent Volatile by Volume (%)</b>	Non-volatile (NA).
<b>Vapor Pressure (mm Hg)</b>	Negligible as solid.	<b>Evaporation Rate</b>	(=1) Non-volatile (NA).
<b>Vapor Density (Air=1)</b>	Data not listed.		
<b>Solubility in Water</b>	200 grams per 100 mL. water at 20°C.		
<b>Appearance &amp; Odor</b>	Colorless crystals, white flakes; slight nitric odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-flammable (NA).	<b>Flammable Limits in Air % by Volume</b>	NA	<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 protective clothing. Use flooding amounts of water in early stages of fire.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 140)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Oxidizing material. In contact with easily oxidizable substances it may react rapidly enough to cause ignition, violent combustion or explosion. Increase the flammability of any combustible substances. Yields toxic gaseous oxides of nitrogen or zinc when involved in fire.

D.O.T. ZINC NITRATE, 5.1, UN 1514, PG II

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