



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. AA 351  
Effective Date December 8, 1993

## SECTION V HEALTH HAZARD DATA

AA 351

**Threshold Limited Value** None listed for this compound (ACGIH 1983-84).  
TLV for Ammonia: 25 ppm, 18 mg/m<sup>3</sup>; STEL: 35 ppm, 27 mg/m<sup>3</sup> (AIR).

**Effects of Overexposure** **INHALATION:** Inhalation of mist or dust may irritate respiratory tract. If heated to the point where ammonia gas is given off, this is highly irritating to the throat at approximately 400 ppm. **INGESTION:** May irritate gastrointestinal tract. Generally considered to be of low toxicity, poorly absorbed from bowel. **SKIN:** Irritation possible from prolonged or repeated contact. **EYES:** Irritation or burning is possible from contact with dust or mist.

**Emergency and First Aid Procedures** **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. **INHALATION:** Remove to fresh air. Additional attention may be required if ammonia is present, as indicated by characteristic smell. **INGESTION:** If swallowed, if conscious, give two to four glasses of water to drink, and induce vomiting. Get 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 heating or contact with acids, alkalis, and oxidizers.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Strong oxidizers, such as nitrates and nitrites; can cause explosions. Acids: cause evolution of sulfur dioxide, which is toxic, corrosive, and oxidizer. Alkalis: accelerate the normal evolution of ammonia.

**Hazardous Decomposition Products** Dangerous; when heated to decomposition. Emits toxic fumes of ammonia, hydrogen sulfide and/or oxides of sulfur.

<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** Wearing proper safety equipment, reclaim for use. Sweep up and place in a suitable container. Small spills may be dissolved in water and flushed to sewer with copious amounts of water if permitted by applicable disposal regulations.

**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.  
Uncontaminated material may be disposed of in a sanitary landfill. Check local codes. RCRA status of unused material: Not a "hazardous waste".

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** None needed in normal laboratory handling. If dusty conditions prevail, work in well-ventilated area or exhaust hood or wear a NIOSH-approved dust mask.

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

**Protective Gloves** Rubber gloves for prolonged or repeated handling. **Eye Protection** Chemical safety glasses.

**Other Protective Equipment** Apron, smock, eye wash station, proper gloves, ventilation hood.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store in a cool, well-ventilated area away from acids, alkalis, and oxidizers. Protect from sun.  
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.

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

<b>Revision</b> No. 3	<b>Date</b> 12/8/93	<b>Approved</b> Alexander A. Piccirilli	<b>Chemical Safety Coordinator</b> AP
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## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	AMMONIUM THIOSULFATE	 <b>CHEMTREC</b> <b>800-424-9300</b> Day 716-226-6177	<b>Health</b>	1
<b>Chemical Synonyms</b>	Ammonium Hyposulfite		<b>Fire</b>	1
<b>Formula</b>	(NH <sub>4</sub> ) <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		<b>Reactivity</b>	1
<b>Unit Size</b>	100, 500 grams; 2.5 Kg.		<b>HMIS *</b> LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4	
<b>C.A.S. No.</b>	7783-18-8			

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ammonium Thiosulfate	98%	None established.

**WARNING! MAY BE HARMFUL IF SWALLOWED. DUST**

**MAY BE IRRITATING TO EYES, NOSE AND THROAT.**

## SECTION III PHYSICAL DATA

<b>Melting Point (°F)</b>	150°C (302°F) decomposes.	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	1.679
<b>Boiling Point (°F)</b>	Decomposes.	<b>Percent Volatile by Volume (%)</b>	Non-volatile.
<b>Vapor Pressure (mm Hg)</b>	Data not listed.	<b>Evaporation Rate ( =1)</b>	Not applicable.
<b>Vapor Density (Air=1)</b>	Data not listed.		
<b>Solubility in Water</b>	Approximately 70 grams per 100 mL. water at 20°C.		
<b>Appearance &amp; Odor</b>	Clear, white crystals; slight ammonia odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-flammable.	<b>Flammable Limits in Air % by Volume</b>	NA	<b>Lower</b>	<b>Upper</b>
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**Extinguisher Media** Use any media suitable for extinguishing supporting fire.

### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep containers cool with water spray.

Discontinued  
Per JAB 10/98

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Ammonia, a toxic and irritating gas is evolved on heating. If heated beyond dryness, some hydrogen sulfide (H<sub>2</sub>S), a highly poisonous gas may be given off. The flammable limits for ammonia in air are 16% to 25% by volume. Hydrogen sulfide (H<sub>2</sub>S) also will burn.

D.O.T. NON-REGULATED.

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