

# MATERIAL SAFETY DATA SHEET

## SECTION V HEALTH HAZARD DATA

(513) 860-4949

MSDS No.: AA0325  
Effective Date: January 1, 2007

### SECTION I NAME

### 24 HOUR EMERGENCY ASSISTANCE

Product	Ammonium Sulfate
Chemical Synonyms	Mascagnite; Diammonium Sulfate
Formula	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>
Unit Size	up to 2.5 Kg.
C.A.S. No.	7783-20-2

**NFPA**

HAZARD RATING  
MINIMAL SLIGHT MODERATE SERIOUS SEVERE  
0 1 2 3 4

**CHEMTREC**  
800-424-9300  
Day 585-226-6177

Health	2
Fire	0
Reactivity	1

**HMIS \***

### SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ammonium sulfate	100%	None established.

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

**DO NOT BREATHE DUST.**

### SECTION III PHYSICAL DATA

Melting Point (°F)	Decomposes above 280°C (536°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.769 at 20°C
Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	Negligible.
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	N/A		
Solubility in Water	70.6 grams per 100 mL. water at 0°C.		
Appearance & Odor	Brownish-gray to white crystals; odorless.		

### SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-combustible.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
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 full protective clothing.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS

Noncombustible. Decomposes above 100°C to toxic ammonia gas. Melts and decomposes with emission of a mixture of ammonia and sulfur trioxide at about 455°F. If accidentally mixed with oxidizers like potassium chlorate, potassium nitrate, or potassium nitrite there is an explosion hazard during a fire.

D.O.T. NON-REGULATED.

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

#### Threshold Limited Value

None established for this product (ACGIH 2001).  
RTECS No. BS4500000 Toxicity studies: Oral-rat LD50: 3000 mg/Kg.

#### Effects of Overexposure

Inhalation of dusts may be irritating to lungs and mucous membranes. Causes sneezing, mild nosebleed to sensitized persons. Ingestion may cause irritation to digestive tract. May cause skin and eye irritation. Exercise appropriate procedures to minimize potential hazards. Target organs: None known.

#### Emergency and First Aid Procedures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### SECTION VI REACTIVITY DATA

Stability	Unstable	X	Conditions to Avoid	Excessive temperature and heat.
	Stable			

Incompatibility (Materials to Avoid)	Strong oxidizers (Potassium chlorate, Potassium nitrate, Potassium nitrite).
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Hazardous Decomposition Products	Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide, nitrogen oxides, sulfur oxides, ammonia.
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Hazardous Polymerization	May Occur	Will Not Occur	X	Conditions to Avoid	Not applicable.

### SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Wear protective equipment and use adequate ventilation. Recover for use if not contaminated. Avoid creating dust. Sweep up spill and place in a suitable container for proper disposal. Wash spill 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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For small spills, dissolve in water and flush to sewer with copious amounts of water. For large spills, dispose of in accordance with federal, state and local regulations.

### SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions exist work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.			
Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves		Eye Protection	
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Other Protective Equipment	Goggles, lab coat, proper gloves, eye wash station, ventilation hood.
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### SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place. Keep container tightly closed when not in use. 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. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.
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Avoid breathing dust. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing.

Revision No. 8	Date 01/01/07	Approved James A. Bertsch	Chemical Safety Coordinator JAB
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