# Ammonium Sulfate

## Section 1:

#### **Product and Company Identification**

#### **Ammonium Sulfate**

#### Synonyms/General Names: Diammonium Sulfate

Product Use: For educational use only

Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

#### 24 Hour Emergency Information Telephone Numbers

CHEMTREC (USA): 800-424-9300 CANUTEC (Canada): 613-424-6666

ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2:	Hazards Identification		
Off-white crystals; no odor.		HMIS (0 to	4)
<b>CAUTION!</b> Body tissue irritant and slightly toxic Target organs: None known	e by ingestion	Health Fire Hazard Reactivity	1 0 0
This material is considered hazardous by the OSH	A Hazard Communication Standard (29 CFR 1910.1200).		

This material is considered hazardous by	ule OSTIA Hazaiu	Communication Standard (2	9 CI K 1910.1200).

Section 3:	Composition / Information on Ingredients

Ammonium Sulfate (7783-20-2), 100%

Section 4:	First Aid Measures		
Always seek professional medical attention after first aid measures are provided.			
Eyes:	Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.		
Skin:	Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.		
Ingestion:	Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink.		
_	Induce vomiting immediately.		
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration.		
Section 5:	Fire Fighting Measures		

#### Fire Fighting Measures

When heated to decomposition, emits acrid fumes of NOx, ammonia, carbon and SOx.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.



#### Section 6:

### Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Sweep up spill and place in sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

#### Section 7: Handling and Storage Green

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eves, or clothing. Wash hands thoroughly after handling.

Storage: Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

#### Section 8: **Exposure Controls / Personal Protection**

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with a dust cartridge. Exposure guidelines: Ammonium Sulfate: OSHA PEL: Not Available, ACGIH: TLV: Not Available, STEL: Not Available.

### Section 9: Physical and Chemical Properties

Molecular formula	$(NH_4)_2SO_4$	Appearance	Off white crystals.	
Molecular weight	132.15.	Odor	None.	
Specific Gravity	1.76 g/mL @ 20°C.	Odor Threshold	N/A.	
Vapor Density (air=1)	N/A.	Solubility	Soluble in water.	
Melting Point	280°C decomposes.	Evaporation rate	N/A.	$(Butyl\ acetate = 1).$
<b>Boiling Point/Range</b>	N/A.	Partition Coefficient	N/A .	$(log P_{OW}).$
Vapor Pressure (20°C)	N/A.	рН	N/A.	
Flash Point:	N/A.	LEL	N/A.	
Autoignition Temp.:	N/A.	UEL	N/A.	
				N/A = Not available or applicable

#### Section 10:

#### **Stability and Reactivity**

Avoid heat and moisture.

**Stability:** Stable under normal conditions of use and storage. **Incompatibility:** May react or be incompatible with oxidizing materials.

Shelf life: Indefinite if stored properly.

#### Section 11:

#### **Toxicology Information**

Acute Symptoms/Signs of exposure: *Eyes*: Redness, tearing, itching, burning, conjunctivitis. *Skin*: Redness, itching. *Ingestion*: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. *Inhalation*: Irritation of mucous membranes, coughing, wheezing, shortness of breath,

Chronic Effects: No information found.

Sensitization: none expected

Ammonium Sulfate: LD50 [oral, rat]; 2840 mg/kg; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

#### Section 12:

**Ecotoxicity (aquatic and terrestrial):** 

## **Ecological Information**

al): Ecological impact has not been determined.

#### Section 13:

#### **Disposal Considerations**

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14:	Transport Information				
DOT Shipping Name: DOT Hazard Class: Identification Number:	Not regulated by DOT.	Canada TDG: Not reg Hazard Class: UN Number:	ulated by TDG.		
Section 15: Regulatory Information					

**EINECS:** Listed (231-984-1). **TSCA:** All components are listed or are exempt.

WHMIS Canada: Not WHMIS Controlled. California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### Section 16:

#### **Other Information**

#### Current Issue Date: January 23, 2009

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