

Safety Data Sheet

Ammonium Sulfate



Section 1 Product Description

Product Name: Ammonium Sulfate
Recommended Use: Science education applications
Synonyms: Mascagnite, Diammonium Sulfate
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

GHS Classification:

Hazardous to the aquatic environment - Acute Category 3, Hazardous to the aquatic environment - Chronic Category 3

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|----------------------|--------------|----------|
| Ammonium Sulfate | 7783-20-2 | 100 |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Nitrogen oxides, Sulfur Oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Vacuum or sweep up material and place in a disposal container

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Section 7 Handling and Storage

Handling: Avoid release to the environment. Avoid contact with skin and eyes.
Storage: Keep container tightly closed in a cool, well-ventilated place.
Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

Section 8 Protection Information

| Chemical Name | (TWA) | ACGIH | (STEL) | (TWA) | OSHA PEL | (STEL) |
|----------------------|--------------|--------------|---------------|--------------|-----------------|---------------|
| No data available | N/A | | N/A | N/A | | N/A |

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use. Good general room ventilation should be sufficient to control airborne contaminants to safe levels.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Gloves: Nitrile

Section 9 Physical Data

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|---|---|
| Formula: (NH ₄) ₂ SO ₄ | Vapor Pressure: N/A |
| Molecular Weight: 132.13 | Evaporation Rate (BuAc=1): N/A |
| Appearance: Crystalline Solid | Vapor Density (Air=1): N/A |
| Odor: No data available | Specific Gravity: 1.77 at 20°C |
| Odor Threshold: No data available | Solubility in Water: Soluble |
| pH: 5.0 - 6 at 132 g/l at 25 °C | Log Pow (calculated): -5.1 at 25 °C |
| Melting Point: No data available | Autoignition Temperature: No data available |
| Boiling Point: No data available | Decomposition Temperature: No data available |
| Flash Point: No data available | Viscosity: No data available |
| Flammable Limits in Air: N/A N/A | Percent Volatile by Volume: N/A |

Section 10 Reactivity Data

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| Reactivity: | No data available |
| Chemical Stability: | Stable under normal conditions. |
| Conditions to Avoid: | None known. |
| Incompatible Materials: | Strong oxidizing agents, Caustics (bases) |
| Hazardous Decomposition Products: | Sulfur Oxides, Nitrogen oxides |
| Hazardous Polymerization: | Will not occur |

Section 11 Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Respiratory disorders
Delayed Effects: No data available

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Acute Toxicity:

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|--|--------------------------------|--|--------------------------------------|--|
| Chemical Name Ammonium Sulfate | CAS Number 7783-20-2 | Oral LD50 Oral LD50 Mouse 4280 mg/kg Oral LD50 Rat 4540 mg/kg | Dermal LD50 Not determined | Inhalation LC50 Not determined |
|--|--------------------------------|--|--------------------------------------|--|

Carcinogenicity:

| | | | | |
|---|--------------------------------|---------------------------|--------------------------|---------------------------|
| Chemical Name No data available | CAS Number 7783-20-2 | IARC Not listed | NTP Not listed | OSHA Not listed |
|---|--------------------------------|---------------------------|--------------------------|---------------------------|

Chronic Effects:

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|------------------------------|---|
| Mutagenicity: | No evidence of a mutagenic effect. |
| Teratogenicity: | No evidence of a teratogenic effect (birth defect). |
| Sensitization: | No evidence of a sensitization effect. |
| Reproductive: | No evidence of negative reproductive effects. |
| Target Organ Effects: | |
| Acute: | See Section 2 |
| Chronic: | Not listed as a carcinogen by IARC, NTP or OSHA. |

Section 12

Ecological Data

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| Overview: | Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Harmful to fish and other water organisms. |
| Mobility: | No data |
| Persistence: | No data |
| Bioaccumulation: | No data |
| Degradability: | No data |
| Other Adverse Effects: | No data |

| | | |
|--|--------------------------------|---|
| Chemical Name Ammonium Sulfate | CAS Number 7783-20-2 | Eco Toxicity 96 HR LC50 BRACHYDANIO RERIO 250 MG/L 96 HR LC50 CYPRINUS CARPIO 18 MG/L 96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L 96 HR LC50 POECILIA RETICULATA 126 MG/L 24 HR EC50 DAPHNIA MAGNA 423 MG/L 48 HR LC50 DAPHNIA MAGNA 14 MG/L |
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Section 13

Disposal Information

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| Disposal Methods: | Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. |
| Waste Disposal Code(s): | Not Determined |

Section 14

Transport Information

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| Ground - DOT Proper Shipping Name: Not regulated for transport | Air - IATA Proper Shipping Name: Not regulated for air transport by IATA. |
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Section 15

Regulatory Information

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| TSCA Status: | All components in this product are on the TSCA Inventory. | | | | | |
| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
| No data available | 7783-20-2 | No | No | No | No | No |

Section 16

Additional Information

Revised: 09/09/2015 Replaces: 09/03/2014 Printed: 10-29-2015

Safety Data Sheet

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |