

Safety Data Sheet

Aluminum Ammonium Sulfate, 12-Hydrate

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Aluminum Ammonium Sulfate, 12-Hydrate
Recommended Use: Science education applications
Synonyms: Aluminum Ammonium Sulfate Dodecahydrate, Alum
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;

WARNING



Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

GHS Classification:

Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

| | |
|---|--|
| Acute Toxicity Oral Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Dermal Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Gas Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Vapor Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |
| Acute Toxicity Inhalation Dust/Mist Contains | 100 % of the mixture consists of ingredient(s) of unknown toxicity |

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|---------------------------|--------------|----------|
| Aluminum Ammonium Sulfate | 7784-26-1 | 100 |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
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.

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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. Evacuate the area promptly. 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 Do not flush spill to drain.

Section 7 Handling and Storage

Handling: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Green - general chemical storage

Section 8 Protection Information

| <u>Chemical Name</u> | <u>(TWA)</u> | <u>ACGIH</u> | <u>(STEL)</u> | <u>(TWA)</u> | <u>OSHA PEL</u> | <u>(STEL)</u> |
|----------------------|--------------|--------------|---------------|--------------|-----------------|---------------|
| 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. Wear a NIOSH approved respirator if levels above the exposure limits are possible.

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.

Gloves: Nitrile

Section 9 Physical Data

| | |
|--|---|
| Formula: AlNH ₄ (SO ₄) ₂ * 12H ₂ O | Vapor Pressure: N/A |
| Molecular Weight: 453.32 | Evaporation Rate (BuAc=1): N/A |
| Appearance: Crystalline Solid | Vapor Density (Air=1): N/A |
| Odor: No data available | Specific Gravity: 1.65 |
| Odor Threshold: No data available | Solubility in Water: Soluble |
| pH: 2.6 at 100 g/l at 25 °C | Log Pow (calculated): No data available |
| 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 | 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: Copper, Zinc
Hazardous Decomposition Products: Sulfur Oxides, Nitrogen oxides
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: N/A
Symptoms (Acute): Respiratory disorders,
Delayed Effects: No data available

| Acute Toxicity: | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|------------|----------------|----------------|-----------------|
| Chemical Name: No data available | 7784-26-1 | Not determined | Not determined | Not determined |

| Carcinogenicity: | CAS Number | IARC | NTP | OSHA |
|--|------------|------------|------------|------------|
| Chemical Name: No data available | 7784-26-1 | Not listed | Not listed | Not listed |

Chronic Effects:
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

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

| Chemical Name | CAS Number | Eco Toxicity |
|---------------|------------|--------------|
| N/A | 7784-26-1 | |

Section 13 Disposal Information

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

| Ground - DOT Proper Shipping Name: | Air - IATA Proper Shipping Name: |
|------------------------------------|--|
| N/A | Not regulated for air transport by IATA. |

Section 15 Regulatory Information

TSCA Status: A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

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| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|-------------------|------------|------------|----------|-----------|-----------|---------------|
| No data available | 7784-26-1 | No | No | No | No | No |

Section 16

Additional Information

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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 |