

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Ammonium Sulfate, Purified

Product Number: 2-13800

Other Identifying Product Numbers: 2-13800-1

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Reagents Inc.

Address: 4746 Sweden Road

Charlotte, NC 28224 USA

Telephone: 800-732-8484

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| | | Hazard | |
|--|------------|-----------|-----------------------------------|
| Hazard Class | Category | Statement | Precautionary Statements |
| Acute Toxicity - Oral | Category 4 | H302 | P264, P270, P301+P312, P330, P501 |
| Hazardous to the Aquatic Environment (Acute) | Category 3 | H402 | P273, P501 |

2.2. GHS Label Elements

Pictograms:



Signal Word: Warning



Hazard Statements:

| Hazard Number | Hazard Statement |
|---------------|--------------------------|
| H302 | Harmful if swallowed. |
| H402 | Harmful to aquatic life. |

Precautionary Statements:

| Precautionary Number | Precautionary Statement | | |
|----------------------|---|--|--|
| P264 | Wash arms, hands and face thoroughly after handling. | | |
| P270 | Do not eat, drink or smoke when using this product. | | |
| P273 | Avoid release to the environment. | | |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. | | |
| P330 | Rinse mouth. | | |
| P501 | Dispose of contents in accordance with local, state, federal and international regulations. | | |

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

| Chemical Name | Formula | Molecular Weight CAS Number | Weight% |
|------------------|----------------|-----------------------------|---------|
| Ammonium Sulfate | $(NH_4)_2SO_4$ | 132.13 g/mol 7783-20-2 | 100.00% |

SECTION 4: First-Aid Measures

4.1. General First Aid Information

 Eye Contact:
 May cause irritation, redness, pain, and tearing.

 Inhalation:
 Not expected to require first aid. If necessary, remove to fresh air.

 Skin Contact:
 May cause slight irritation.

 Ingestion:
 IF
 SWALLOWED:
 Call a POISON CENTER or physician if you feel unwell. Dilute with water or milk. Do not induce vomiting.
 Call a physician if necessary.



4.2. Most Important Symptoms and Effects, Acute and Delayed

Ingestion may cause irritation of the gastrointestinal tract. This material presents little toxicity unless ingested in large quantity. May cause irritation to the skin and eyes. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire hazard. May explode if mixed with oxidizers, such as Potassium Nitrate, Potassium Nitrite and Potassium Chlorate.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Pick up in a manner that does not generate dust. Powder may be moistened with water to aid in the clean-up.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

| | Chemical Name | Limit Type | Cour | ntry | Expos | ure Limit | | | | | nation S | | | | |
|------|-------------------------|---|-------|------|-------|-----------|--|--|--|--|----------|----|--|--|--|
| | Data not available. () | | | | | | | | | | | | | | |
| 3.2. | Exposure Controls | | | | | | | | | | | | | | |
| | Engineering Controls: | No specific controls are needed. Normal room ventilation is adequate. | | | | | | | | | | | | | |
| | Respiratory Protection: | A system of local or general exhaust is recommended to keep exposure levels below the Airborne Exposure Limits. necessary, wear a dust mask respirator to minimize exposure to dust particles. | | | | | | | | | Limits. | lf | | | |
| | Skin Protection: | Chemical resistant gl | oves. | | | | | | | | | | | | |

Eye Protection: Safety glasses or goggles.

8.



8.3. Personal Protective Equipment

A system of local or general exhaust is recommended to keep exposure levels below the Airborne Exposure Limits. If necessary, wear a dust mask respirator to minimize exposure to dust particles. Chemical resistant gloves. Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

| Appearance: | Colorless/white solid | | | | | |
|--|-----------------------|--|--|--|--|--|
| Physical State: | Solid | | | | | |
| Odor: | Odorless | | | | | |
| Odor Threshold: | Data not available. | | | | | |
| pH: | Data not available. | | | | | |
| Melting/Freezing Point: | 280°C (decomposes) | | | | | |
| Initial Boiling Point /Range: | Data not available. | | | | | |
| Flash Point: | Data not available. | | | | | |
| Evaporation Rate: | Data not available. | | | | | |
| Flammability: | Data not available. | | | | | |
| Flammability/Explosive Limits: | Data not available. | | | | | |
| Vapor Pressure: | Data not available. | | | | | |
| Vapor Density: | Data not available. | | | | | |
| Relative Density: | 1.77 | | | | | |
| Solubility: | 754 G/L at 20°C | | | | | |
| Partition Coefficient (n-Octanol/Water): | -5.1 at 25 °C | | | | | |
| Auto-Ignition Temperature: | Data not available. | | | | | |
| Decomposition Temperature: | Data not available. | | | | | |
| Viscosity: | Data not available. | | | | | |
| ExplosiveProperties: | Data not available. | | | | | |
| Oxidizing Properties: | Data not available. | | | | | |

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.



10.3. Conditions to Avoid and Incompatible Materials

Sodium Hypochlorite, Potassium Chlorate, Potassium Nitrite, strong oxidizers.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, IF thoroughly after handling. Do hands and face not eat, drink or smoke when using this product. SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: 2840 mg/kg (Ammonium Sulfate), behavioral and respiration effects noted.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.



Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.



14.2. Transportation by Air - International Air Transport Association (IATA)

UN Number: N/A

Proper Shipping Name:

Hazard Class:

Packing Group:

Hazard Placard Labels:

SECTION 15: Regulatory Information

- 15.1. Occupational Safety and Health Administration (OSHA) Hazards Not listed.
- 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Not listed.
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI) Ammonium Sulfate (CAS # 7783-20-2): 1.0 % de minimis concentration (10% of total aqueous Ammonia is reportable under this listing)

15.5. Massachusetts Right-to-Know Substance List

Ammonium Sulfate (CAS # 7783-20-2): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Ammonium Sulfate (CAS # 7783-20-2): Environmental hazard Ammonium Sulfate (CAS # 7783-20-2): Present

15.7. New Jersey Worker and Community Right-to-Know Components Not listed.

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Ammonium Sulfate (CAS # 7783-20-2): Present

15.10. United States of America Toxic Substances Control Act (TSCA) List

Ammonium Sulfate (CAS # 7783-20-2): Present



15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful if swallowed. Harmful to aquatic life.

Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 2 Flammability: 0 Reactivity: ⁰ Special Hazard:



16.4. Document Revision

Last Revision Date: 8/31/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard Alteration of its characteristics concentration, evaporation, addition of other substances, by or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.