Material Safety Data Sheet
Iron (III) Ammonium Sulfate Dodecahydrate

ACC# 09713

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Iron (III) Ammonium Sulfate Dodecahydrate  
**Catalog Numbers:** AC423690030, S80010, S80010-1, S800101, I75-3, I75-500, ZZLBFAS405  
**Synonyms:** Ammonium ferric sulfate; ferric alum; ferrous ammonium sulfate dodecahydrate.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
For information, call: 201-796-7100  
Emergency Number: 201-796-7100  
For CHEMTREC assistance, call: 800-424-9300  
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7783-83-7</td>
<td>Ferric Ammonium Sulfate Dodecahydrate</td>
<td>&gt;99%</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** None listed.  
**Risk Phrases:** None listed.

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: light purple solid. **Warning!** Causes eye and skin irritation. Causes digestive and respiratory tract irritation. May cause cardiac disturbances. May cause liver and kidney damage. The toxicological properties of this material have not been fully investigated.  
**Target Organs:** None.

**Potential Health Effects**  
**Eye:** May cause eye irritation.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. Based upon known information concerning inorganic iron-containing substances, may cause digestive tract irritation and damage, cardiovascular abnormalities, liver/kidney changes, and cerebral swelling.  
**Inhalation:** May cause respiratory tract irritation.  
**Chronic:** No information found.

Section 4 - First Aid Measures
**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

**Antidote:** The use of Deferoxamine as a chelating agent should be determined only by qualified medical personnel.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use extinguishing media most appropriate for the surrounding fire.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

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**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

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**Section 7 - Handling and Storage**

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances.

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**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
</table>

https://fscimage.fishersci.com/msds/09713.htm

11/29/2004
OSHA Vacated PELs: Ferric Ammonium Sulfate Dodecahydrate: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: light purple
Odor: odorless
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not applicable.
Evaporation Rate: Not applicable.
Viscosity: Not applicable.
Boiling Point: 446 deg F
Freezing/Melting Point: 99 deg F
Decomposition Temperature: Not available.
Solubility: Soluble in water.
Specific Gravity/Density: 1.71 (water=1)
Molecular Formula: FeNH4S2O8.12H2O
Molecular Weight: 482.1577

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid: Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials: Strong oxidizers.
Hazardous Decomposition Products: Oxides of nitrogen, ammonia and/or derivatives.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: 
CAS#: 7783-83-7: WS5900000
LD50/LC50: 
Not available.
Carcinogenicity: 
CAS# 7783-83-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Neurotoxicity: No information available.
Mutagenicity: No information available.
Other Studies: None.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.
Environmental: No information reported.
Physical: No information available.
Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
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<tr>
<td>Hazard Class:</td>
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<tr>
<td>UN Number:</td>
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<tr>
<td>Packing Group:</td>
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Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 7783-83-7 is not listed on the TSCA inventory. It is for research and development use only.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 7783-83-7: reactive.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 7783-83-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:
Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)
CAS# 7783-83-7: 1

Canada - DSL/NDSL
None of the chemicals in this product are listed on the DSL or NDSL list. Canada - WHMIS
This product has a WHMIS classification of D2B.

Canadian Ingredient Disclosure List
CAS# 7783-83-7 (listed as Iron salts (soluble)) is listed on the Canadian Ingredient Disclosure List.

Exposure Limits
CAS# 7783-83-7: OEL-DENMARK:TWA 1 mg(Fe)/m3 JANUARY 1993 OEL-FINLA
ND:TWA 1 mg(Fe)/m3 JANUARY 1993 OEL-THE NETHERLANDS:TWA 1 mg(Fe)/m3
JANUARY 1993 OEL-SWITZERLAND:TWA 1 mg(Fe)/m3 JANUARY 1993 OEL-UNIT
ED KINGDOM:TWA 1 mg(Fe)/m3; STEL 2 mg(Fe)/m3 JANUARY 1993

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997
Revision #2 Date: 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make
no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.