

# 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

CAS#	Chemical Name	Percent	EINECS/ELINCS
7783-83-7	Ferric Ammonium Sulfate Dodecahydrate	>99%	unlisted

**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.

## 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

## 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.

## 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.

## 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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs

Ferric Ammonium Sulfate Dodecahydrate	none listed	none listed	none listed
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**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:** FeNH<sub>4</sub>S<sub>2</sub>O<sub>8</sub>.12H<sub>2</sub>O

**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.

<b>Section 12 - Ecological Information</b>
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**Ecotoxicity:** No data available. No information available.**Environmental:** No information reported.**Physical:** No information available.**Other:** None.

<b>Section 13 - Disposal Considerations</b>
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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.

<b>Section 14 - Transport Information</b>
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	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

<b>Section 15 - Regulatory Information</b>
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**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 &amp; 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)/m<sup>3</sup> JANUARY 1993 OEL-FINLAND:TWA 1 mg(Fe)/m<sup>3</sup> JANUARY 1993 OEL-THE NETHERLANDS:TWA 1 mg(Fe)/m<sup>3</sup> JANUARY 1993 OEL-SWITZERLAND:TWA 1 mg(Fe)/m<sup>3</sup> JANUARY 1993 OEL-UNITED KINGDOM:TWA 1 mg(Fe)/m<sup>3</sup>;STEL 2 mg(Fe)/m<sup>3</sup> 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*

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