

# Material Safety Data Sheet

## Ferric Sulfate Monohydrate

ACC# 45419

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Ferric Sulfate Monohydrate**Catalog Numbers:** S80013, S93243**Synonyms:** Diiron Trisulfate; Ferric Sulfate; Iron Persulfate; Iron Sesquisulfate; Iron Sulfate (2:3); Iron (3+) Sulfate; Sulfuric Acid, Iron**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
10028-22-5	Ferric sulfate, monohydrate	100	233-072-9

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: yellow-gray solid.

**Caution!** May cause respiratory tract irritation. Causes severe digestive tract irritation with pain, nausea, vomiting and diarrhea. May corrode the digestive tract with hemorrhaging and possible shock. May cause liver and kidney damage.

**Target Organs:** None.

#### Potential Health Effects

**Eye:** May cause eye irritation.**Skin:** May cause skin irritation.**Ingestion:** May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause liver and kidney damage.**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 immediately.

**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. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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

## 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 alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

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

## 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 or absorb material, then place into a suitable clean, dry, closed container for disposal.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Discard contaminated shoes.

**Storage:** Store in a cool, dry place. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
	1 mg/m <sup>3</sup> TWA (as Fe)	1 mg/m <sup>3</sup> TWA (as Fe)	

Ferric sulfate, monohydrate	(listed under Iron salts (soluble)).	(listed under Iron salts (soluble)).	none listed
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**OSHA Vacated PELs:** Ferric sulfate, monohydrate: 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 protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** yellow-gray

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Negligible.

**Vapor Density:** Not available.

**Evaporation Rate:** Negligible.

**Viscosity:** Not available.

**Boiling Point:** Not applicable.

**Freezing/Melting Point:** Decomposes.

**Decomposition Temperature:** 480 deg C

**Solubility:** Soluble in water.

**Specific Gravity/Density:** 3.097

**Molecular Formula:** Fe<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>.H<sub>2</sub>O

**Molecular Weight:** 399.8668

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other Materials:** Corrosive to metals.

**Hazardous Decomposition Products:** Sulfur oxides (SO<sub>x</sub>), including sulfur oxide and sulfur dioxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 10028-22-5: NO8505000

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 10028-22-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Mutagenicity:** No data available.

**Neurotoxicity:** No data available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## 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

	US DOT	Canada TDG
<b>Shipping Name:</b>	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	No information available.
<b>Hazard Class:</b>	8	
<b>UN Number:</b>	UN3260	
<b>Packing Group:</b>	II	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 10028-22-5 is listed on the TSCA inventory.

#### 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.

**CERCLA Hazardous Substances and corresponding RQs**

CAS# 10028-22-5: 1000 lb final RQ; 454 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**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:**

CAS# 10028-22-5 is listed as a Hazardous Substance 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# 10028-22-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, (listed as Iron salts (soluble)), Massachusetts.

**California Prop 65**

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:**

XN

**Risk Phrases:**

R 22 Harmful if swallowed.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**WGK (Water Danger/Protection)**

CAS# 10028-22-5: 1

**Canada - DSL/NDSL**

CAS# 10028-22-5 is listed on Canada's DSL List.

**Canada - WHMIS**

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 10028-22-5 (listed as Iron salts (soluble)) is listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 12/12/1997

**Revision #4 Date:** 3/15/2007

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