



Health	1
Fire	0
Reactivity	0
Personal Protection	E

# Material Safety Data Sheet Ferric ammonium sulfate dodecahydrate MSDS

Section 1: Chemical Product and Company Identification			
Product Name: Ferric ammonium sulfate dodecahydrate	Contact Information:		
Catalog Codes: SLF1219	Sciencelab.com, Inc.		
CAS#: 7783-83-7	14025 Smith Rd. Houston, Texas 77396		
RTECS: WS5900000	US Sales: 1-800-901-7247		
TSCA: TSCA 8(b) inventory: No products were found.	International Sales: 1-281-441-4400		
CI#: Not available.	Order Online: ScienceLab.com		
Synonym: Ammonium Iron (III) Sulfate Dodecahydrate	CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300		
Chemical Name: Ferric Ammonium Sulfate Dodecahydrate	International CHEMTREC, call: 1-703-527-3887		
Chemical Formula: FeNH4(SO4)2.12H2O	For non-emergency assistance, call: 1-281-441-4400		

# Section 2: Composition and Information on Ingredients

#### **Composition:**

Name	CAS #	% by Weight
Ferric ammonium sulfate dodecahydrate	7783-83-7	100

Toxicological Data on Ingredients: Ferric ammonium sulfate dodecahydrate LD50: Not available. LC50: Not available.

# **Section 3: Hazards Identification**

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

## **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

# **Section 4: First Aid Measures**

## Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

## Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

## Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

### Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

## Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

**Explosion Hazards in Presence of Various Substances:** 

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

# **Section 6: Accidental Release Measures**

#### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

#### Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

# Section 7: Handling and Storage

## **Precautions:**

Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

## **Section 8: Exposure Controls/Personal Protection**

#### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### **Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

#### **Exposure Limits:**

TWA: 1 (mg(Fe)/m) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

## **Section 9: Physical and Chemical Properties**

Physical state and appearance: Solid. (Crystalline solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 482.2 g/mole

**Color:** Colorless to pale Violet.

pH (1% soln/water): Not available.

**Boiling Point:** 230°C (446°F)

Melting Point: 37°C (98.6°F) - 41 C

Critical Temperature: Not available.

Specific Gravity: 1.71 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

lonicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Easily soluble in cold water. Practically insoluble in alcohol

# Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

## **Section 11: Toxicological Information**

Routes of Entry: Inhalation. Ingestion.

#### **Toxicity to Animals:**

LD50: Not available. LC50: Not available.

Chronic Effects on Humans: May cause damage to the following organs: kidneys, liver.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)

#### Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation by mechanical action. Inhalation: Dust may cause respiratory tract irritation. Symptoms may include coughing, sore throat, labored breathing, and chest pain. Ingestion: Ingestion of large doses may cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting, diarrhea, and black stool. Pink urine is a strong indicator of iron poisoning. Lack of appetite, Liver damage, renal failure, hypotension, cardiac failure, central nervous system effects/changes in behavior (lethargy, restlessness, confusion, seizures), leukocytosis, acidosis, coma, and death have also been recorded from acute iron poisoning.

# Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

#### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

# Section 13: Disposal Considerations

#### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

# Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

Identification: Not applicable.

# **Section 15: Other Regulatory Information** Federal and State Regulations: No products were found. Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). Other Classifications: WHMIS (Canada): Not controlled under WHMIS (Canada). DSCL (EEC): This product is not classified according to the EU regulations. Not applicable. HMIS (U.S.A.): Health Hazard: 1 Fire Hazard: 0 Reactivity: 0 Personal Protection: E National Fire Protection Association (U.S.A.): Health: 1 Flammability: 0 Reactivity: 0

Specific hazard:

## **Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

# Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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