



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name Ferric Ammonium Sulfate, Dodecahydrate, GR **Product Code** FX0205

Manufacturer EMD Chemicals Inc.
P.O. Box 70
480 Democrat Road
Gibbstown, NJ 08027
Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.

Effective Date 2/27/2006
Print Date 3/13/2006

For More Information Call

856-423-6300 Technical Service
Monday-Friday: 8:00 AM - 5:00 PM

In Case of Emergency Call

800-424-9300 CHEMTREC (USA)
613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Synonym AMMONIUM IRON (III) SULFATE

Material Uses Analytical reagent.

Chemical Family Inorganic salt.

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Ferric Ammonium Sulfate, Dodecahydrate	7783-83-7	100

+ Section 3. Hazards Identification

Physical State and Appearance Solid. (Crystals solid.)

Emergency Overview CAUTION!
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes May be hazardous in case of eye contact (irritant).

Skin May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation May be hazardous in case of inhalation (lung irritant).

Ingestion No known acute effects of this product resulting from ingestion.

Potential Chronic Health Effects

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

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Medical Conditions Repeated or prolonged exposure is not known to aggravate medical condition.
Aggravated by
Overexposure:

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.

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

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.

Section 5. Fire Fighting Measures

Flammability of the Product May be combustible at high temperature.

Auto-ignition Temperature Not available.

Flash Points Not available.

Flammable Limits Not available.

Products of Combustion Some metallic oxides.

Fire Hazards in Presence of Various Substances Not available.

Explosion Hazards in Presence of Various Substances Risks of explosion of the product in presence of static discharge: No.
Risks of explosion of the product in presence of mechanical impact: No.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Protective Clothing (Fire) Be sure to use an approved/certified respirator or equivalent.

Special Remarks on Fire Hazards Not available.

Special Remarks on Explosion Hazards Not available.

Section 6. Accidental Release Measures

Small Spill and Leak Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill and Leak Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Spill Kit Information No specific spill kit required for this product.

Section 7. Handling and Storage

Handling Avoid breathing dust. Do not ingest. Avoid contact with skin and eyes.

Storage Keep container in a cool, well-ventilated area.

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

Eyes Splash goggles.

Body Lab coat.

Respiratory Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Hands Gloves.

Feet Not applicable.

**Protective Clothing
(Pictograms)**



**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.

Product Name

Ferric Ammonium Sulfate, Dodecahydrate

Exposure Limits

Belgium Minister of Labour (Belgium, 1998).

VL: 1 mg/m³ 8 hour(s).

SUVA (Switzerland, 1997).

MAK: 1 mg/m³ 8 hour(s).

DK-Arbejdstilsynet (Denmark, 1996).

GV: 1 mg/m³ 8 hour(s).

National Authority for Occupational Safety/Health (Ireland, 1999).

STEL: 2 mg/m³ 15 minute(s).

OEL: 1 mg/m³ 8 hour(s).

Arbeidsinspectie (Netherlands, 1999).

TGG 8 uur: 1 mg/m³ 8 hour(s).

EH40-OES (United Kingdom (UK), 1997).

STEL: 2 mg/m³ 15 minute(s).

TWA: 1 mg/m³ 8 hour(s).

Section 9. Physical and Chemical Properties

Odor Odorless.

Color Violet. (Light.)

**Physical State and
Appearance** Solid. (Crystals solid.)

Molecular Weight 482.26 g/mole

Molecular Formula O8S2FeH4N . 12H2O

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pH	Not available.
Boiling/Condensation Point	Not available.
Melting/Freezing Point	39.05 to 41.05°C (102.3 to 105.9°F)
Specific Gravity	Not available.
Vapor Pressure	Not available.
Vapor Density	Not available.
Odor Threshold	Not available.
Evaporation Rate	Not available.
LogK_{ow}	Not available.
Solubility	Soluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances Rem/Incompatibility	Not available.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

RTECS Number:	Ferric Ammonium Sulfate, Dodecahydrate	WS5900000
Toxicity	LD ₅₀ : Not available. LC ₅₀ : Not available.	
Chronic Effects on Humans	Not available.	
Acute Effects on Humans	May be hazardous in case of eye contact (irritant). May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May be hazardous in case of inhalation (lung irritant).	
Synergetic Products (Toxicologically)	Not available.	
Irritancy	<u>Draize Test</u> : Not available.	
Sensitization	Not available.	
Carcinogenic Effects	This material is not known to cause cancer in animals or humans.	
Toxicity to Reproductive System	Not available.	
Teratogenic Effects		

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Not available.

Mutagenic Effects

Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).

Section 12. Ecological Information

Ecotoxicity

Not available.

BOD5 and COD

Not available.

Toxicity of the Products of Biodegradation

The product itself and its products of degradation are not toxic.

Section 13. Disposal Considerations

EPA Waste Number

Not available.

Treatment

Material does not have an EPA Waste Number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

Section 14. Transport Information

DOT Classification

Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.

TDG Classification

Not available.

IMO/IMDG Classification

Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.

ICAO/IATA Classification

Proper Shipping Name: CHEMICALS, N.O.S.
RQ: Not applicable.

+ Section 15. Regulatory Information

U.S. Federal Regulations

TSCA 8(b) inventory: Ferric Ammonium Sulfate, Dodecahydrate
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Ferric Ammonium Sulfate, Dodecahydrate
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Ferric Ammonium Sulfate, Dodecahydrate: Immediate (Acute) Health Hazard
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada)

Not controlled under WHMIS (Canada).

No products were found.

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

International Regulations

EINECS

Not available.

DSCL (EEC)

R36/37/38- Irritating to eyes, respiratory system and skin.

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International Lists Australia (NICNAS): Ferric Ammonium Sulfate, Dodecahydrate

Philippines (RA6969): Ferric Ammonium Sulfate, Dodecahydrate
China: No products were found.

State Regulations

No products were found.

California prop. 65: No products were found.

Section 16. Other Information

**National Fire
Protection
Association
(U.S.A.)**



**Changed Since Last
Revision**



Notice to Reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.