



# Ferric Ammonium Sulfate Dodecahydrate

# **SECTION 1. IDENTIFICATION**

Product Identifier	Ferric Ammonium Sulfate Dodecahydrate
Other Means of Identification	None
Product Code(s)	FE2110, FE2120
Product Family	Inorganic Solid
Recommended Use	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	0779

# **SECTION 2. HAZARD IDENTIFICATION**

#### Classification

Not classified under any hazard class.

**Label Elements** 

Not applicable

Other Hazards

None known.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance:

Chemical Name	CAS No.	%	Other Identifiers
Sulfuric acid, ammonium iron(3+) salt (2:1:1), dodecahydrate	7783-83-7	> 99	Ammonium ferric sulfate

# **SECTION 4. FIRST-AID MEASURES**

### First-aid Measures

### Inhalation

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

### Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation or a rash occurs, get medical advice or attention.

# Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

### Ingestion

Do not induce vomiting. Immediately call a Poison Centre or doctor.

### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

### Most Important Symptoms and Effects, Acute and Delayed

None known.

#### **Immediate Medical Attention and Special Treatment**

#### Special Instructions

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Extinguishing Media**

#### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

#### Unsuitable Extinguishing Media

None known.

### **Specific Hazards Arising from the Product**

Does not burn. Closed containers may rupture violently when heated releasing contents. In a fire, the following hazardous materials may be generated: corrosive, flammable ammonia; corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides.

### **Special Protective Equipment and Precautions for Fire-fighters**

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

#### **Environmental Precautions**

No special precautions are necessary.

### Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

# **SECTION 7. HANDLING AND STORAGE**

#### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating dusts. Do not breathe in this product. Only use where there is adequate ventilation. Keep only in original packaging.

#### **Conditions for Safe Storage**

No special requirements for storage area. Store in an area that is: cool, dry, well-ventilated.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA

Sulfuric acid, ammonium iron(3+) salt	1 mg/m3	1 mg/m3		
(2:1:1), dodecahydrate				

### **Appropriate Engineering Controls**

General ventilation is usually adequate. Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### **Individual Protection Measures**

### **Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

### **Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

# **Basic Physical and Chemical Properties**

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Appearance	Violet powder.
Odour	Odourless
Odour Threshold	Not applicable
рН	2.5 (1.0 M solution)
Melting Point/Freezing Point	39 - 41 °C (102 - 106 °F) (melting); 39 - 41 °C (102 - 106 °F) (freezing)
Initial Boiling Point/Range	230 °C (446 °F)
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.710
Solubility	Not available in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Solid
Molecular Weight	782.19

# SECTION 10. STABILITY AND REACTIVITY

#### Reactivity

Not reactive under normal conditions of use.

# Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known. **Conditions to Avoid** Generation of dust. Light. Incompatible materials. **Incompatible Materials** Strong oxidizing agents (e.g. perchloric acid). **Hazardous Decomposition Products** Corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides; corrosive, flammable ammonia.

# SECTION 11. TOXICOLOGICAL INFORMATION

# Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

# **Acute Toxicity**

LC50: No information was located.

LD50 (oral): No information was located.

LD50 (dermal): No information was located.

# **Skin Corrosion/Irritation**

No information was located.

# Serious Eye Damage/Irritation

No information was located.

# STOT (Specific Target Organ Toxicity) - Single Exposure

# Inhalation

No information was located.

# Ingestion

No information was located.

# **Aspiration Hazard**

No information was located.

# STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

# **Respiratory and/or Skin Sensitization**

# No information was located.

# Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Sulfuric acid, ammonium iron(3+) salt (2:1:1), dodecahydrate	Not Listed	Not designated	Not Listed	Not Listed

# **Reproductive Toxicity**

**Development of Offspring** No information was located.

# Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

# Germ Cell Mutagenicity

No information was located.

# **Interactive Effects**

No information was located.

# **SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

# **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

### Special Precautions Not applicable

# Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# **SECTION 15. REGULATORY INFORMATION**

# Safety, Health and Environmental Regulations

### Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Not listed on the DSL or NDSL.

# USA

Toxic Substances Control Act (TSCA) Section 8(b)

Not listed on the TSCA Inventory.

# **SECTION 16. OTHER INFORMATION**

NFPA Rating	Health - 0 Flammability - 0 Instability - 0
SDS Prepared By	Alphachem Limited
Phone No.	(905)-821-2995
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Date of Last Revision	November 09, 2016
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
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