

## **Safety Data Sheet**

# Ferric Ammonium Sulfate Dodecahydrate, ACS

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ferric Ammonium Sulfate Dodecahydrate, ACS

Synonyms/Generic Names: Ammonium iron alum; Ammonium ferric sulfate dodecahydrate; Iron

ammonium alum, Ammonium Iron (III) dodecahydrate

Product Number: ØF€Ĝ

Product Use: Industrial, Manufacturing or Laboratory use

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For More Information Call: H€HĒ Î GĒĒ €€ÁMonday-Friday 8:00-Í :€0)

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#### 2. HAZARDS IDENTIFICATION

**OSHA Hazards:** Irritant

Target Organs: None

Signal Words: Danger

**Pictograms:** 



#### **GHS Classification:**

Skin corrosion	Category 1
Serious eye damage	Category 1

#### **GHS Label Elements, including precautionary statements:**

#### **Hazard Statements:**

H314	Causes severe skin burns and eye damage		

#### Precautionary Statements:

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	P305+P351+P338	P338   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
		lenses, if present and easy to do. Continue rinsing.	
P310 Immediately call a POISON CENTER or doctor/ physician.			

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#### **Potential Health Effects**

Eyes	Causes eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion	May be harmful if swallowed.	

#### **NFPA Ratings**

Health	1
Flammability	0
Reactivity	0
Specific hazard	Not Available

#### **HMIS Ratings**

Health	1
Fire	0
Reactivity	0
Personal	E

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Ferric Ammonium Sulfate Dodecahydrate	100	7783-83-7	233-382-4	H <sub>4</sub> FeNO <sub>8</sub> S <sub>2</sub> •12H <sub>2</sub> O	482.19 g/mol

### 4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.		
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not		
	breathing, give artificial respiration. Get medical attention if necessary.		
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated		
	clothing and wash using soap. Get medical attention if necessary.		
Ingestion	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If		
	conscious, wash out mouth with water. Get medical attention if necessary.		

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

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.	
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective	
and precautions for firefighters	clothing, including eye protection and boots.	
Specific hazards arising from	hazards arising from Emits toxic fumes (nitrogen oxides, sulfur oxides, iron oxides) under fire	
the chemical	conditions. (See also Stability and Reactivity section).	

### **6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and	See section 8 for recommendations on the use of personal protective equipment.
emergency procedures	
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Pick up and arrange disposal without creating dust. Sweep up and place
containment and cleaning up	in suitable, closed containers for disposal. Clean surfaces thoroughly with
	water to remove residual contamination. Dispose of all waste and cleanup
	materials in accordance with regulations.

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#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

#### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Light sensitive and hygroscopic material. Keep away from incompatible materials (see section 10 for incompatibilities).

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, apron or lab coat.	
Other	Not Available	

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Colorless to pale violet crystalline solid.
Odor	Odorless.
Odor threshold	Not Available
pH	1 at 482.2 g/l at 25°C (77°F)
Melting point/freezing point	37°C (98.6°F)
Initial boiling point and boiling 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
Vapor pressure	Not Available
Vapor density	Not Available
Density	1.71 (Water = 1)
Solubility (ies)	Easily soluble in cold water. Insoluble in alcohol.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

#### 10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Not Available	
Incompatible Materials	Strong oxidizing agents	
Hazardous Decomposition Products	Nitrogen oxides, sulfur oxides, iron oxides.	

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### 11. TOXICOLOGICAL INFORMATION

### **Acute Toxicity**

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

#### Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified
	as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified
	as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified
	as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.
Eyes	Irritation, redness, watering eyes, itchiness.
Respiratory	Irritation, coughing, wheezing, sore throat, chest pain.
Ingestion	Irritation, nausea, vomiting, diarrhea, lack of appetite, abdominal pain, black stool. Pink
	urine is a strong indicator of iron poisoning.

Chronic Toxicity	Damage to kidneys and liver.	
Teratogenicity	Not Available	
Mutagenicity	May affect genetic material. Genotoxicity in vitro - rat - Ascites tumor	
Embryotoxicity	Not Available	
Specific Target Organ Toxicity	Not Available	
Reproductive Toxicity	Not Available	

### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

### 13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

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The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

#### 14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

#### 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Ferric Ammonium Sulfate
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Not Listed

#### 16. OTHER INFORMATION

Revision	Date
Revision 1	07-19-2012

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