



## Material Safety Data Sheet

Iron(III) ammonium citrate

MSDS# 09700

### Section 1 - Chemical Product and Company Identification

MSDS Name: Iron(III) ammonium citrate

Catalog Numbers: AC211840000, AC211840010, 61221-5000, I72-500

Synonyms: Ferric ammonium citrate; Citric acid, ammonium iron(3+) salt; Ammonium ferric citrate; Ammonium iron(III) citrate; Compounds of NH<sub>3</sub>, iron, and citric acid of undetermined structure.

Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

### Section 2 - Composition, Information on Ingredients

-----  
CAS#: 1185-57-5  
Chemical Name: Ferric ammonium citrate  
%: 100  
EINECS#: 214-686-6  
-----

Hazard Symbols: None listed

Risk Phrases: None listed

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Caution! Hygroscopic (absorbs moisture from the air). Light sensitive. May cause eye, skin, and respiratory tract irritation.  
Target Organs: None known.

#### Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. Inorganic iron compounds may cause gastrointestinal irritation and damage, vomiting, pulmonary edema, convulsions, rapid heart beat and low blood pressure. Ingestion of iron compounds may cause hemorrhage and necrosis of the stomach with shock, severe diarrhea, and possible coma.

Inhalation: May cause respiratory tract irritation.

Chronic: No information found.

### Section 4 - First Aid Measures

Eyes: Immediately 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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

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:

## 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Autoignition Temperature:	Not applicable.
Flash Point:	Not applicable.
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
NFPA Rating:	health: 1; flammability: 1; instability: 1;

## 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, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

Handling:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.
Storage:	Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Store protected from light.

## Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ferric ammonium citrate	1 mg/m <sup>3</sup> TWA (as Fe) (listed under Iron salts (soluble)).	1 mg/m <sup>3</sup> TWA (as Fe) (listed under Iron salts (soluble)).	none listed

OSHA Vacated PELs: Ferric ammonium citrate: 1 mg/m<sup>3</sup> TWA (as Fe) (listed under Iron salts (soluble))

### Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Exposure Limits

### 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 minimize contact with skin.
Respirators:	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

Physical State: Solid

Color: yellow, green or red-brown

Odor: none reported

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: Decomposes.

Decomposition Temperature: Not available

Solubility in water: Freely Soluble

Specific Gravity/Density: Not available.

Molecular Formula: Not applicable.

Molecular Weight:

#### Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Deliquescent (tending to absorb atmospheric water vapor and become liquid). Reduced to ferrous salt by light.

Conditions to Avoid: Light, dust generation, moisture, excess heat.

Incompatibilities with Other Materials Strong oxidizing agents.

Hazardous Decomposition Products Nitrogen oxides, carbon monoxide, carbon dioxide, ammonia.

Hazardous Polymerization Has not been reported.

#### Section 11 - Toxicological Information

RTECS#: CAS# 1185-57-5: GE7540000

LD50/LC50: RTECS: Not available.

Carcinogenicity: Ferric ammonium citrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

Not available

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

#### Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 1185-57-5: 1000 lb final RQ; 454 kg final RQ

#### Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 1185-57-5: Not available

#### Canada

CAS# 1185-57-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2B

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.

CAS# 1185-57-5 is not listed on Canada's Ingredient Disclosure List.

#### US Federal

##### TSCA

CAS# 1185-57-5 is listed on the TSCA  
Inventory.

#### Section 16 - Other Information

MSDS Creation Date: 6/23/1998

Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

-----