


SECTION I NAME		24 HOUR EMERGENCY ASSISTANCE	
Product	FERRIC AMMONIUM CITRATE	 CHEMTREC 800-424-9300 Day 716-226-6177 Night 716-334-4222 NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4	Health 1
Chemical Synonyms	Ammonium Ferric Citrate		Fire 0
Formula	Undetermined structure		Reactivity 1
Net(s) Size	500 grams		
A.S. No.	1185-57-5		

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES		
Principal Hazardous Component(s)	%	TLV Units
(a) Ferric Ammonium Citrate (Brown).	100%	None established.
(b) Ferric Ammonium Citrate (Green).	100%	

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES AND MUCOUS MEMBRANES.

SECTION III PHYSICAL DATA			
Melting Point (°F)	Decomposes on heating.	Specific Gravity (H ₂ O = 1)	Unknown. (Variable)
Boiling Point (°F)	Decomposes.	Percent Volatile by Volume (%)	Non-volatile (NA).
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate (= 1)	Non-volatile (NA).
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	25 grams per 100 mL water.		
Appearance & Odor	(a) Reddish-brown granular powder. (b) Green transparent scales, pearls, granules, or powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA			
Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA
Extinguisher Media	Water spray; carbon dioxide (CO ₂); dry chemical (ABC).		

SPECIAL FIREFIGHTING PROCEDURES	
In fire conditions, wear a NIOSH-approved self-contained breathing apparatus.	
Ammonia: CAS No. 7664-41-7.....	(a) 9% (b) 7.5%
Iron: CAS No. 7439-89-6.....	16.5-18.5% 14.5-16%
Citric Acid, hydrated: CAS No. 5949-29-1.....	65% 75%

1987 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.4, GUIDE PAGE NO. 31)

UNUSUAL FIRE AND EXPLOSION HAZARDS
Nil or zero (Bureau of mines relative explosion hazard rating scale) as dust. Melts and decomposes with emission of ammonia, carbon dioxide and/or carbon monoxide; can react vigorously with oxidizing materials.

D.O.T. **FERRIC AMMONIUM CITRATE, ORM-E, NA9118**

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value	ACGIH-TLV-1mg/m ³ (as Iron). Toxicity: Oral mouse LD50: 1000mg/Kg; oral gpg LD50: 350mg/Kg
Effects of Overexposure	INGESTION: Excessive intake of soluble iron salts may lead to a generalized increased iron content in body tissues such as the liver. EYES: Contact irritant. SKIN: Contact irritant. Exercise appropriate procedures to minimize potential hazards.

Emergency and First Aid Procedures
EYES: Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Flush thoroughly with water, then wash with mild soap and water. INHALATION: Remove to fresh air. If breathing is difficult give oxygen. If breathing has stopped give artificial respiration. Get medical attention. INGESTION: If large amounts have been swallowed, get medical attention immediately.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Protect from light. Moisture-very deliquescent.
	Stable	X	
Incompatibility (Materials to Avoid)	Strong oxidizers, strong alkalis.		
Hazardous Decomposition Products	Thermal decomposition or burning may produce oxides of nitrogen, carbon dioxide and/or carbon monoxide, ammonia and fumes.		
Hazardous Polymerization	Conditions to Avoid		
May Occur	Will Not Occur	Not applicable.	
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Recover for use if not contaminated. Wear protective safety equipment and use adequate ventilation. Avoid making dust. Sweep up and place in a suitable container for disposal.
---	---

Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. For small quantities dissolve in water and flush to sewer with copious amounts of water or dispose of in an approved incinerator equipped with an afterburner and scrubber.
-----------------------	--

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH-approved dust mask or respirator.		
Ventilation	Local Exhaust	YES	Special
	Mechanical (General)	Recommended.	Other
Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
Other Protective Equipment	Eye wash station, lab coat, proper gloves, safety glasses, ventilation hood..		

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place and protect from light. Wash thoroughly after handling. Keep container tightly closed when not in use.
Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. No. 2	Date 2/10/92	Approved Alexander Piccirilli	Chemical Safety Coordinator AP
----------------	--------------	-------------------------------	--------------------------------

The information contained herein is furnished without warranty of any kind. Employers should use this information 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 of these materials and the safety and health of employees.