


## Material Safety Data Sheet

### Section 1 – Product and Company Identification

<b>Product Name</b>	Ferric ammonium Citrate
<b>Chemical Name</b>	Ammonium iron(III) citrate
<b>Chemical Formula</b>	$C_6H_8O_7 \cdot xFe \cdot yNH_3$
<b>Company Identification</b>	Showa Kako Corporation 18-23, Yoshino-cho, Suita-city, Osaka 564-0054 JAPAN
<b>Telephone Number</b>	+81-6-6384-1501
<b>24-hour Emergency Telephone Number</b>	+81-6-6384-1501
<b>Fax Number</b>	+81-6-6384-2287

### Section 2 – Hazards Information

<b>GHS Classification</b>	
<b>Physical Hazards</b>	Not classified
<b>Health Hazards</b>	
<b>Skin corrosion / Irritation</b>	Category 2
<b>Eye irritation</b>	Category 2
<b>Specific target organ toxicity single exposure</b>	Category 3
<b>Environmental Hazards</b>	Not classified
<b>GHS Symbol</b>	
<b>Signal Word</b>	Warning
<b>Hazard Statements</b>	
H316	Causes mild skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation.
<b>Precautionary Statements</b>	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
<b>Response Statements</b>	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

	to do. Continue rinsing.
<b>Storage Statements</b>	None
<b>Disposal Statements</b>	None
<b>Inhalation</b>	Not harmful if handled properly
<b>Skin</b>	May produce skin irritation
<b>Eyes</b>	May cause eye irritation
<b>Ingestion</b>	Not expected to present a significant ingestion hazards under anticipated condition of normal use.
<b>GHS Classification</b>	Not classified

### Section 3 – Composition and Information on Ingredients

<b>Substance/Mixture</b>	Substance
<b>Chemical Name</b>	Ammonium iron(III) citrate
<b>CAS #</b>	1185-57-5
<b>Percent</b>	98.0% min.

### Section 4 – First Aid Measures

<b>Eyes</b>	Immediately flush eyes with copious amounts of water for at least 15 minutes. Consult an ophthalmologist.
<b>Skin</b>	Remove contaminated clothing and shoes. Flush skin with copious amount of water or warm water. Call a physician if necessary.
<b>Ingestion</b>	Wash out mouth with water. Give 1-2 cups of water or milk. Never give anything by mouth to unconscious person. Call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

### Section 5 – Fire Fighting Measures

<b>Flash Point</b>	No data found
<b>Autoignition</b>	No data found
<b>Explosion Limits</b>	<b>Lower</b> No data found
	<b>Upper</b> No data found
<b>Extinguish Media</b>	Water, powder, carbon dioxide, foam
<b>Firefighting Instructions</b>	Avoid non-firefighting equipped personnel to enter. Extinguish upwind from the fire wearing appropriate protective gear.

### Section 6 – Accidental Release Measures

<b>Spills/ Leaks</b>	Evacuate area. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag
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	and hold for waste disposal. Avoid raising dust. Ventilator area and wash spill site after material pickup is complete.
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### Section 7 – Handling and Storage

<b>Handling</b>	Wear appropriate protective gear. Do not contact with eyes, skin and on clothing. Do not inhale. Handle with care. Provide adequate ventilation. Wash mouth and hand after handling the material.
<b>Storage</b>	Keep container tightly closed. Avoid such conditions as direct sunlight, high temperature, high humidity and high piling. Store indoor at room temperature.

### Section 8 – Exposure Controls, Personal Protection

<b>Engineering Controls</b>	Facilities storing or utilizing the material should be equipped with an eye wash facilities and a safety shower. Use adequate ventilation to keep airborne concentrations low.
<b>Exposure Limits</b>	No data found
<b>Personal Protective Equipment</b>	
<b>Eyes</b>	Safety goggles
<b>Skin</b>	Rubber gloves
<b>Clothing</b>	Protective clothing and rubber boots
<b>Respirators</b>	Anti-dust mask

### Section 9 – Physical and Chemical Properties

<b>Physical State</b>	Crystalline powder
<b>Appearance</b>	Green, red, brown
<b>Odor</b>	Odorless or slightly smells like ammonia
<b>pH</b>	No data found
<b>Boiling Point</b>	No data found
<b>Melting Point</b>	No data found
<b>Flash Point</b>	No data found
<b>Autoignition</b>	None
<b>Explosibility</b>	None
<b>Vapor Pressure</b>	No data found
<b>Vapor Density</b>	No data found
<b>Solubility</b>	Soluble in water (60% at 25°C)
<b>Molecular Weight</b>	-

### Section 10 – Stability and Reactivity

<b>Stability</b>	Stable when handled properly
<b>Conditions to avoid</b>	Sunlight, high temperature and high humidity Ammonium salt produces ammonium gas when heated with basic solution.
<b>Incompatibilities with Other Material</b>	No data found
<b>Hazardous Decomposition Product</b>	No data found
<b>Hazardous Polymerization</b>	Will not occur

### Section 11 – Toxicological information

<b>RTECS #</b>	No data found
<b>LD50/ LC50</b>	iv-mouse LD <sub>50</sub> : 1000 mg/kg
<b>Carcinogenicity</b>	No data found
<b>Mutagenicity</b>	No data found
<b>Reproductive Effects</b>	No data found
<b>Teratogenicity</b>	No data found
<b>Immunology</b>	No data found
<b>Irritation</b>	May cause irritation to skin

### Section 12 – Ecological Information

<b>Ecotoxicity</b>	No data found
<b>Environmental Standard</b>	No data found

### Section 13 – Disposal Consideration

<b>Disposal Method</b>	Federal (national), state or local laws and regulations will determine the proper waste disposal method.
<b>Regulation Method</b>	Federal (national), state or local laws and regulations

### Section 14 – Transport Information

<b>Shipping Name</b>	Not applicable
<b>Hazard Class</b>	Not applicable
<b>UN #</b>	Not applicable
<b>Packing Group</b>	Not applicable

### Section 15 – Regulatory Information

<b>United States</b>	<b>TSCA</b>	On the list (as anhydrous)
<b>EC</b>	<b>EINECS</b>	214-686-6
<b>Japan</b>	<b>PRTR law</b>	Not on the list

### Section 16 – Other Information

<b>MSDS Creation Date</b>	August 29, 2013
<b>Revised Date</b>	-
<b>Revised No.</b>	1st

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