

MATERIAL SAFETY DATA SHEET

Product: **Ferric Ammonium Oxalate**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: Ferric Ammonium Oxalate, Granular, Technical

Product Code: CH-13268423A

Chemical Formula: $(\text{NH}_4)_3\text{Fe}(\text{C}_2\text{O}_4)_3 \cdot 6\text{H}_2\text{O}$

General or Generic ID: Not available.

Company

ArtChemicals.com

2250 Davis Street

San Leandro, CA 94577-2204

510-639-4670

Emergency Telephone Number:

1-800-451-8346

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS No.</u>	<u>Chemical Identity</u>	<u>Common Name</u>	<u>%</u>
13268-42-3	N/A	Ferric ammonium oxalate	100

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye:

Very hazardous in case of eye contact (irritant). Symptoms include stinging, tearing, redness and impairment of vision. The degree of injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. E

Skin:

Very hazardous in case of skin contact (irritant). The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Skin contact can produce inflammation and blistering.

Ingestion:

Very hazardous in case of ingestion. Will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

MATERIAL SAFETY DATA SHEET

Product: **Ferric Ammonium Oxalate**

Inhalation:

Extremely hazardous in case of inhalation. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Symptoms of Exposure:

Not available.

Development Information:

Not available.

Cancer Information:

Not available.

Primary Route(s) of Entry:

The substance is toxic to kidneys, lungs, liver, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

4. FIRST AID MEASURES

Inhalation:

If affected, promptly remove individual to fresh air. Get medical attention immediately.

Ingestion:

Do NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. Call physician immediately. If victim is not breathing perform mouth-to-mouth. Get medical attention immediately.

Eyes:

No known effect with eye contact. Remove contact lenses if worn. In case of contact, immediately flush with water for at least 15 minutes. Do not use eye ointment. Get medical attention immediately.

Skin:

Immediately remove contaminated clothing and thoroughly flush skin with plenty of water (15 minutes). Wash thoroughly with disinfectant soap and water. Cold water may be use. Launder clothing before reuse. Get medical attention immediately.

MATERIAL SAFETY DATA SHEET

Product: **Ferric Ammonium Oxalate**

Note to Physicians:

Not available.

5. FIRE FIGHTING MEASURES

Flash Point: May be combustible at high temperature.

Explosive Limit: Not applicable.

Auto-ignition Temperature: Not applicable.

Hazardous Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...). Some metallic oxides.

Extinguishing Media: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

SPECIAL FIRE-FIGHTING PROCEDURES: Not available.

NFPA CODES: Health = 2 Flammability = 0 Reactivity = 0

6. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Product: **Ferric Ammonium Oxalate**

7. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Be sure to use an approved/certified respirator or equivalent.

Skin Protection:

Wear resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots or lab coat.

Eye Protection:

Chemical splash goggles in compliance with OSHA regulations are advised. Face shield. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Other Protective Clothing or Equipment:

Provide sufficient mechanical ventilation to maintain exposure below level of overexposure. Boots. Full suit. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling product.
TWA: 1 (mg/m³) from ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Green crystalline solid.

Molecular Weight: 428.07 g/mole

pH: 5 [Acidic.]

Boiling Point: Not available.

Product: **Ferric Ammonium Oxalate**

Melting Point: Decomposes.
Specific Gravity: 1.78 (Water=1)
Vapor Pressure: Not applicable.
Evaporation Rate: Not available.
Solubility in Water: Easy soluble in cold water.

10. STABILITY AND REACTIVITY

Incompatibility: Not available.
Stability: Stable.
Hazardous Decomposition: N/A
Hazardous Polymerization: Will not occur.

Special Remarks on Reactivity: Not available.

11. TOXICOLOGICAL INFORMATION

The substance is toxic to kidneys, lungs, liver, mucous membranes. Extremely hazardous in case of inhalation. Very hazardous in case of skin contact (irritant), of ingestion.

12. ECOLOGICAL INFORMATION

Not available.
Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

13. DISPOSAL CONSIDERATION

Waste Disposal Method:
Dispose of in accordance with all applicable local, state and federal regulations.

MATERIAL SAFETY DATA SHEET

Product: **Ferric Ammonium Oxalate**

14. DOT SHIPPING NAME & IDENTIFICATION:

NON-REGULATED. Not as DOT controlled material (United States).

15. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that information is current, applicable, and suitable to their circumstances.