

**SAFETY DATA SHEET
FOR
THORN SMITH LABORATORIES**

SECTION 1 - IDENTIFICATION

Trade Name: **Ferrous Ammonium Sulfate**
Catalog Number: 81-1035 (100g) / 81-1036 (500g)
Product Description: Student Reference Standards and Reagent Chemicals
Manufacturer: Auric Enterprises, Inc.
d/b/a Thorn Smith Laboratories
Address: 7755 Narrow Gauge Road
Beulah, MI 49617
Phone Number: 231-882-4672
SDS Number: TSL-104

SECTION 2 – HAZARDS IDENTIFICATION

Classification of Substance or Mixture: Not a hazardous substance or mixture as packaged in 100g or 500g containers.

GHS Label Elements, including precautionary statements: Not a hazardous substance or mixture as packaged in 100g or 500g containers.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Potential Acute Health Effects: May be hazardous in case of f ingestion and inhalation. Slightly hazardous in case of eye and skin contact (irritant).

Potential Chronic Health Effects: CARCENOGENIC EFFECTS: N/A
MUTAGENIC EFFECTS: N/A
TERATOGENIC EFFECTS: N/A
DEVELOPMENTAL TOXICITY: N/A

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ferrous Ammonium Sulfate Hexahydrate

Formula: $(\text{NH}_4)_2\text{Fe}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$
CAS No.: 7783-85-9
Common Synonyms: Ammonium Ferrous Sulfate (Hexahydrate)
OSHA PEL: TWA 1 mg/m³ (Fe)
ACGIH TLV: TWA 1/m³ (Fe)

SECTION 4 – FIRST AID MEASURES

Eye Contact: Check for and remove contact lenses. Flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention.

Skin Contact: Remove any contaminated clothing. Wipe off excess from skin. Flush skin with water. Get medical attention if irritation develops or persists.

Inhalation: If inhaled, move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.

Ingestion: If swallowed, and if person is conscious, immediately rinse mouth with plenty of water. DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.

SECTION 5 – FIRE FIGHTING MEASURES

Flammability: Non-Flammable

Flash Points: Not Applicable

Auto-Ignition: Not Applicable

Flammable Limits: N/A

Extinguishing Media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable Extinguishing Media: Do not use heavy water stream.

Fire Fighting Procedure: Firefighters should wear self-contained breathing apparatus and protective clothing to prevent inhalation or contact with skin and eyes. Avoid fire-fighting water entering into environment.

Special Hazards arising from substance or mixture: No Data Available.

Fire/Explosion Hazards: No Data Available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Utilize recommended protective clothing and equipment. Sweep up or shovel spills in a manner that does not disperse dust into the air. If necessary, neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and dispose of in accordance to all applicable federal, state and local regulations.

SECTION 7 – HANDLING AND STORAGE

Storage Temperatures: Store at ambient temperatures.

Shelf Life: Unlimited in tightly closed container in a dry and well-ventilated place.

Special Sensitivity: Store away from oxidizing agents and acids.

Precautions to be taken in handling and storage: Do not breathe dust. Avoid contact with skin and eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type): Dust respirator. If airborne Concentration is high, use an appropriate NIOSH approved cartridge respirator.

Protective Gloves: Wear protective gloves.

Eye Protection: Wear chemical safety glasses.

Ventilation To Be Used: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

☒ Local Exhaust ☒ Mechanical (General) ☐ Special
☐ Other (Specify)

Other Protective Clothing and Equipment: Wear clean body-covering clothing. Emergency showers and eye wash stations should be available.

Hygienic Work Practices: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Do not let product enter drains.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Solid
Color: Greenish-blue
Odor: Odorless
Boiling Point: N/A
Melting Point: Decomposition Temperature: 100°C (212°F) – 110°C
Flash Point: N/A
Solubility in Water: 26.9g/100cc water
Specific Gravity: 1.864g/cm³ (water=1)
Molecular Weight: 392.14 g/mole

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: ☒ Stable ☐ Unstable
Conditions to Avoid: Light, air.
Incompatibility (Materials to avoid): Oxidizing agents, acids.
Hazardous Decomposition Products: N/A
HAZARDOUS POLYMERIZATION: ☐ May Occur ☒ Will Not Occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Acute Toxic Effects: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation. Inhalation: Symptoms may include coughing, wheezing, shortness of breath. May cause pulmonary edema. Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include stomach/abdominal pain, nausea, lack of appetite, vomiting/vomiting brown or bloody stomach contents, diarrhea, black stool. Other symptoms may include pallor or cyanosis, central nervous system effects (CNS depression, lethargy, restlessness, confusion, lassitude, drowsiness), hyperventilation due to metabolic acidosis, hyperglycemia, hypotension, and cardiovascular collapse. May cause kidney damage. Pink urine is a strong indicator of iron poisoning. May also cause liver damage (hepatonecrosis, hepatotoxicity, hepatic failure). Although rare, acute iron poisoning may also cause Early Coagulopathy. This is a blood coagulation disorder which is associated with severe hepatotoxicity. Acute or serious poisoning from iron or iron salts is rare in adults.

Acute Oral Toxicity (LD50): 3250 mg/kg (rat)

Chronic Toxic Effects: May cause damage to the following organs: liver, spleen. Repeated or prolonged ingestion of iron or iron salts results in increased accumulation of iron in the body, particularly the liver, spleen and lymphatic system. It may cause liver damage (Hemosiderosis in the liver), and rarely

Hemochromatosis in the Kupffer cells of the liver. Chronic iron poisoning may also cause leukocytosis and anemia. Prolonged eye contact may cause conjunctivitis, and a brownish discoloration of the eye lens.

Carcinogenicity:

No components of this product are listed by IARC, ACGIH, NTP, OSHA, or CA Prop 65.

SECTION 12 – ECOLOGICAL INFORMATION

None known.

SECTION 13 – DISPOSAL CONSIDERATIONS

Must be disposed of in accordance with all applicable local, state and federal environmental regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Domestic (D.O.T.)

Proper Shipping Name: Chemicals, n.o.s.

International (T.M.O.)

Proper Shipping Name: Chemicals, n.o.s.

Air (I.C.A.O.)

Proper Shipping Name: Chemicals, n.o.s.

SECTION 15 – REGULATORY INFORMATION

SARA TITLE III HAZARD CATEGORIES AND LISTS

SARA 302 Components

Not Listed

SARA 313 Toxic Chemicals

Not Listed

CERCLA Hazardous Substance

Yes, Ferrous Ammonium Sulfate

TSCA Inventory

Yes, Ferrous Ammonium Sulfate

SECTION 16 – OTHER INFORMATION

No other information found.

Date Prepared:	October 2, 1989
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