

**SAFETY DATA SHEET  
FOR  
THORN SMITH LABORATORIES**

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**SECTION 1 - IDENTIFICATION**

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Trade Name: **Ferrous Ammonium Sulfate** for Fe  
Catalog Number: 80-1260 (Vials) / 80-1261 (100g)  
Product Description: Analyzed Quantitative Unknowns  
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-005

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**SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS**

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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/m<sup>3</sup> (Fe)  
ACGIH TLV: TWA 1/m<sup>3</sup> (Fe)

Soluble Sulfate:

Formula:  $\text{Na}_2\text{SO}_4$   
CAS No.: 7757-82-6  
OSHA PEL: N/E  
ACGIH TLV: N/E  
OTHER LIMITS:N/A

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**SECTION 2 – HAZARDS IDENTIFICATION**

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**Classification of Substance or Mixture:** Not a hazardous substance or mixture as packaged in 10g student vials or 100g containers.

**GHS Label Elements, including precautionary statements:** Not a hazardous substance or mixture as packaged in 10g student vials or 100g 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. May be 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

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### SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

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**Soluble Sulfate:**

Formula:  $\text{Na}_2\text{SO}_4$   
CAS No.: 7757-82-6  
OSHA PEL: N/E  
ACGIH TLV: N/E  
OTHER LIMITS: N/A

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### SECTION 4 – FIRST AID MEASURES

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**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. Get medical attention.

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### SECTION 5 – FIRE FIGHTING MEASURES

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**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:** Under fire conditions, hazardous fumes will be present.  
**Fire/Explosion Hazards:** No Data Available.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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**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. Prevent entry into sewers or public waters. Dispose of in accordance to all applicable federal, state and local regulations.

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## SECTION 7 – HANDLING AND STORAGE

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**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 strong acids, sources of ignition, and direct sunlight.

**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 .

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## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Respiratory Protection (Specify Type):** For nuisance exposures use N95 type 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.

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## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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**Physical Form:** Solid

**Color:** Greenish-blue

**Odor:** Odorless

**Boiling Point:** N/A

**Melting Point:** 100°C (212°F) (NH<sub>4</sub>)<sub>2</sub>Fe (SO<sub>4</sub>)<sub>2</sub>•6H<sub>2</sub>O; 884°C (1623°F) Na<sub>2</sub>SO<sub>4</sub>

**Flash Point:** N/A

**Solubility in Water:** 26.9g/100cc water (NH<sub>4</sub>)<sub>2</sub>Fe (SO<sub>4</sub>)<sub>2</sub>•6H<sub>2</sub>O; Appreciable (More than 10%) Na<sub>2</sub>SO<sub>4</sub>

**Specific Gravity:** 1.86g/cm<sup>3</sup> (water=1) (NH<sub>4</sub>)<sub>2</sub>Fe (SO<sub>4</sub>)<sub>2</sub>•6H<sub>2</sub>O; 2.68 Na<sub>2</sub>SO<sub>4</sub>

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## SECTION 10 – STABILITY AND REACTIVITY

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**STABILITY:**             Stable                             Unstable

**Conditions to Avoid:** Humidity

**Incompatibility (Materials to avoid):** Carbon Monoxide, Carbon Dioxide; Aluminum, magnesium, mineral acids, strong acids, strong bases.

**Hazardous Decomposition Products:** Oxides of sulfur may form when heated to decomposition.

**HAZARDOUS POLYMERIZATION:**    May Occur    Will Not Occur

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**SECTION 11 – TOXICOLOGICAL INFORMATION**

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**Irritation:**

Causes serious eye irritation. Causes skin irritation. Causes respiratory irritation.

**Carcinogenicity** {(NH<sub>4</sub>)<sub>2</sub>Fe (SO<sub>4</sub>)<sub>2</sub>•6H<sub>2</sub>O, - Na<sub>2</sub>SO<sub>4</sub>}

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

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**SECTION 12 – ECOLOGICAL INFORMATION**

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**Persistence – degradability:**        Biodegradable

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**SECTION 13 – DISPOSAL CONSIDERATIONS**

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Avoid release to the environment. Dispose of in accordance with all applicable local, state and federal environmental regulations.

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**SECTION 14 – TRANSPORTATION INFORMATION**

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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.

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**SECTION 15 – REGULATORY INFORMATION**

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**SARA TITLE III HAZARD CATEGORIES AND LISTS**

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.\

**SARA 313 Toxic Chemicals**

Sodium Sulfate

**CERCLA Hazardous Substance**

Ferrous Ammonium Sulfate

**TSCA Inventory**

Sodium Sulfate

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**SECTION 16 – OTHER INFORMATION**

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No information found.

Date Prepared:	October 2, 1989
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