



Material Safety Data Sheet



HMIS

Health Hazard	2
Fire Hazard	0
Reactivity	0

PPE (See Section 15)



Section 1. Chemical Product and Company Identification

Trade Name	Cyanide Test 1	Part #	RE2031
Manufacturer	Haztech Systems, Inc. PO Box 929 Mariposa, CA 95338	CAS #	7783-85-9 / 6132-04-3
Commercial Name	Ferrous ammonium sulfate hexahydrate Sodium citrate dihydrate	RTECS	BR6500000 / GE7580000
Synonyms		TSCA	TSCA 8(b) inventory: Ferrous ammonium sulfate hexahydrate Sodium citrate dihydrate
Chemical Formula	FeSO4(NH4)2SO4.6H2O, C6H5Na3O7.2H2O	CI #	
Supplier	Spectrum Chemical Mfg. Corp. 14422 S. San Pedro St. Gardena, CA 90248	In case of emergency contact CHEMTREC (24 hours) at 800-424-9300 HazTech Systems, Inc. 800-543-5487 Spectrum Chemical Mfg. Corp. 310-516-8000	

Section 2. Composition and Information on Ingredients

Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m3)	STEL	CEIL (mg/m3)	
Ferrous ammonium sulfate hexahydrate	7783-85-9	1			4%
Sodium citrate dihydrate	6132-04-	3			6%

Toxicological Data on Ingredients
 Ferrous ammonium sulfate hexahydrate: ORAL (LD50): Acute: 3250 mg/kg (Rat).
 Sodium citrate dihydrate LD50: Not available. LC50: Not available.

Section 3. Hazards Identification

Potential Acute Health Effects: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Section 5. Fire and Explosion Data

Flammability	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Point	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	These products are carbon oxides (CO, CO ₂). Some metallic oxides.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not applicable.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
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Section 7. Handling and Storage

Precautions	Do not ingest. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.
Storage	Keep in HazCat Kit.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use in a well ventilated area.
Personal Protection	Gloves and goggles.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid	Volatility	Not available
Molecular Weight	392.14 g/mole	Odor Threshold	Not available
pH (1% Solution in Water)	8 (Basic)	Water/Oil Dist. Coeff.	Not available
Boiling Point	Not available	Ionicity (in Water)	Not available
Melting Point	Not available.	Dispersion Properties	Not available
Critical Temperature	Not available	Solubility	Easily soluble in water. Insoluble in methanol.
Specific Gravity	Not available	Odor	Odorless.
Vapor Pressure	Not available	Taste	Not available
Vapor Density	Not available	Color	Green

Section 10. Stability and Reactivity Data

Stability	Product is stable.	Corrosivity	Non-corrosive in presence of glass.
Instability Temperature	Not available.	Special Remarks on Corrosivity	Not available.
Conditions of Instability	Not available.	Polymerization	Will not polymerize.
Incompatibility with Various Substances	Not available.		

Section 11. Toxicological Information

Route of Entry	Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Ferrous ammonium sulfate: Acute oral toxicity (LD50): 3250 mg/kg (Rat). Sodium citrate dihydrate: LD50: Not available. LC50: Not available.
Chronic Effects on Humans	The substance is toxic to lungs, mucous membranes.
Other Toxic Effects on Humans	Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations TSCA 8(b) inventory: Ferrous ammonium sulfate hexahydrate
TSCA 8(b) inventory: Sodium citrate dihydrate

California Proposition 65 Warnings

Other Regulation OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other classifications WHMIS (Canada) CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC) R36/38- Irritating to eyes and skin.
R36- Irritating to eyes.

Section 16. Other Information

Part Number(s) RE2031

References Not available.

Other Special Considerations Not available.

Validated by R. Houghton 10/9/02

Verified by R. Turkington

Call 1-800-543-5487

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Haztech Systems, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.