

## Material Safety Data Sheet

311316

**Section 1: Chemical Product and Company Identification**

|  |   |
|--|---|
| <b>Catalog Number:</b>                                     | 3113  |
| <b>Product Identity:</b>                                   | FERRIC CHLORIDE OXIDIZING SOLUTION  |
| <b>Manufacturer's Name:</b><br>RICCA CHEMICAL COMPANY LLC  | <b>Emergency Contact(24 hr) -- CHEMTREC®</b><br>Domestic: 800-424-9300<br>International: 703-527-3887 |
| <b>CAGE Code:</b> 4TCW6, 0V553, 4XZQ2                      |   |
| <b>Address:</b><br>448 West Fork Dr<br>Arlington, TX 76012 | <b>Telephone Number For Information:</b><br>817-461-5601  |
| <b>Date Prepared:</b><br>1/10/00                           | <b>Revision:</b> 1<br><br>Last Revised: 09/18/2001<br>Date Printed: 03/20/2014 8:58:25 am             |

**Section 2. Composition/Information on Ingredients**

| Component                   | CAS Registry # | Concentration | ACGIH TLV                      | OSHA PEL                       |
|-----------------------------|----------------|---------------|--------------------------------|--------------------------------|
| Ferric Chloride Hexahydrate | 10025-77-1     | 0.8 - 1.2     | Not Available<br>1 mg/m3       | Not Available                  |
| Sulfamic Acid               | 5329-14-6      | 1.4 - 1.8     | Not Available<br>Not Available | Not Available<br>Not Available |
| Water, Deionized            | 7732-18-5      | Balance       | Not Available<br>Not Available | Not Available<br>Not Available |

**Section 3: Hazard Identification**

**Emergency Overview:** Does not present any significant health hazards. Irritating to the eyes and skin. Wash areas of contact with water. If ingested, dilute with water. Call a physician if necessary.

**Target Organs:** eyes, skin, gastrointestinal tract, liver.

**Eye Contact:** May cause irritation, redness, pain, and tearing.

**Inhalation:** Not likely to be hazardous by inhalation.

**Skin Contact:** May cause irritation, redness, and pain.

**Ingestion:** May cause sore throat, vomiting, diarrhea, stomach upset.

**Chronic Effects/Carcinogenicity:** None

IARC - No.

NTP - No.

OSHA - No.

## MSDS

**Reproductive Information:** Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Ferric Chloride Hexahydrate.

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**Teratology (Birth Defect) Information:** Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Ferric Chloride Hexahydrate.

Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Ferric Chloride Hexahydrate.

### Section 4: First Aid Measures - In all cases, seek qualified evaluation.

**Eye Contact:** Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Skin Contact:** Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.

**Ingestion:** Dilute with water or milk. Call a physician if necessary.

### Section 5: Fire Fighting Measures

**Flash Point:** Not Available.

**Method Used:** Not Available.

**LFL:** Not Available.

**UFL:** Not Available.

**Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.

**Fire Fighting Instructions:** Use normal procedures/instructions.

**Fire Fighting Equipment:** Use protective clothing and breathing equipment appropriate for the surrounding fire.

### Section 6: Accidental Release Measures

Absorb with suitable material and dispose of in accordance with local regulations. Check local regulations for the proper disposal of iron containing products.

### Section 7. Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

**Safety Storage Code:** General

### Section 8: Exposure Control/Personal Protection

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

### Section 9: Physical and Chemical Properties

**Appearance:** Clear, yellow-green liquid

**pH:** Acidic

**Odor:** odorless

**Boiling Point(°C):** Approximately 100

**Solubility in Water:** Infinite

**Melting Point(°C):** Approximately 0

**Specific Gravity:** Approximately 1

**Vapor Pressure:** Not Applicable.

### Section 10: Stability and Reactivity

**Chemical Stability:** Stable under normal conditions of use and storage.

**Incompatibility:** Strong Oxidizers, Nitric Acid.

**Hazardous Decomposition Products:** Oxides of Nitrogen, Carbon and Sulfur.

**Hazardous Polymerization:** Will not occur.

## MSDS

For RICCA, SpectroPure, Red Bird, and Solutions Plus Brands  
Emergency Contact(24 hr) -- CHEMTREC®  
Domestic: 800-424-9300  
International: 703-527-3887

FERRIC CHLORIDE OXIDIZING SOLUTION

### Section 11. Toxicological Information

LD50, Oral, Rat: (Sulfamic Acid) 3160 mg/kg; LDLo, Oral, Rat (Ferric Chloride Hexahydrate) 900 mg/kg; Details of toxic effects not reported other than lethal dose value.

### Section 12. Ecological Information

**Ecotoxicological Information:** No information found.

**Chemical Fate Information:** No information found.

### Section 13. Disposal Considerations

Dilute with water, neutralize with dilute sodium hydroxide solution then flush to the sewer if local regulations allow. If not allowed, containerize for proper disposal at an approved waste disposal facility.

Always dispose of in accordance with local, state and federal regulations.

### Section 14. Transport Information

Part Numbers:

This product is not regulated.

### Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

**OSHA Status:** The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

**TSCA Status:** All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

**Sara Title III:**

**Section 302 Extremely Hazardous Substances:** Not Applicable.

**Section 311/312 Hazardous Categories:** No

**Section 313 Toxic Chemicals:** Not Applicable.

**California:** None Reported.

**Pennsylvania:** Ferric Chloride Hexahydrate is listed as an Environmental Hazard on the state's Hazardous Substances List. Ferric Chloride Hexahydrate is listed as an Environmental Hazard on the state's Hazardous Substances List.

**RCRA Status:** Not Applicable.

**CERCLA Reportable Quantity:** Ferric Chloride Hexahydrate - 1000 pounds. Ferric Chloride Hexahydrate - 1000 pounds.

**WHMIS:** Not Applicable.

### Section 16. Other Information

**NFPA Ratings:**

|           |                 |               |                         |
|-----------|-----------------|---------------|-------------------------|
| Health: 1 | Flammability: 0 | Reactivity: 0 | Special Notice Key:None |
|-----------|-----------------|---------------|-------------------------|

**HMIS Ratings:**

|           |                 |               |  |
|-----------|-----------------|---------------|--|
| Health: 1 | Flammability: 0 | Reactivity: 0 | Protective Equipment: B (Protective Eyewear, Gloves) |
|-----------|-----------------|---------------|--|

Rev 1, 10-09-2001: Reformatted to electronic data format.



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### FERRIC CHLORIDE OXIDIZING SOLUTION

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.