RICCA CHEMICAL COMPANY

MSDS

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number:

3110, 3118, 3119, 3120, 9400, F-305, F037040, R3107200, SF037040, SF037060

Product Identity:
FERRIC CHLORIDE, 4 - 11% (w/v) Aqueous Solutions, YELLOW PRIMARY SOLUTION

Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	**Emergency Contact(24 hr) --** CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 4TCW6, 0V553, 4XZQ2	
Address: 448 West Fork Dr Arlington, TX 76012	**Telephone Number For Information:** 817-461-5601
Date Prepared: 2/4/00	**Revision:** 8 Last Revised: 09/09/2013 Date Printed: 03/09/2014 8:40:52 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Ferric Chloride Hexahydrate	10025-77-1	4 - 11% (w/v)	Not Available 1 mg/m3	Not Available Not Available
Hydrochloric Acid	7647-01-0	< 3% (v/v)	C 5 ppm C 7.5 mg/m3	C 5 ppm C 7 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

Section 3: Hazard Identification

Emergency Overview: Mildly corrosive. 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, respiratory system, 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: Repeated ingestion of large doses may cause liver damage.

IARC - Hydrochloric Acid is unclassifiable as to carcinogenicity to humans . Hydrochloric Acid is unclassifiable as to carcinogenicity to humans .

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Ferric Chloride Hexahydrate. Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid. Reproductive effects cited in 'Registry of Toxic
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 Hydrochloric Acid. Mutation data cited in 'Registry of Toxic Effects of

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. Do not induce vomiting. 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: Corrosive

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 light to dark amber colored liquid
Odor: Odorless
Solubility in Water: Infinite
Specific Gravity: Approximately 1.0 - 1.1
pH: Acidic
Boiling Point(°C): Approximately 100
Melting Point(°C): Approximately 0
Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatibility: Strong Oxidizers, Alkalis.
Hazardous Decomposition Products: Can emit toxic fumes of Hydrogen Chloride and Chlorine gas when heated to decomposition.
Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

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

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse unless there are regulations prohibiting this practice due to the iron content . 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: 3110-16, 3110-32, 3110-4, 3118-1, 3120-1, 3120-16, 3120-32, 3120-4, 9400-16, F-305 500ML, R3107200-10F, SF037040-1C, SF037060-4A, SF037060-500A

D.O.T. Shipping Name: Ferric Chloride Solution

D.O.T. Hazard Class: 8

U.N. / N.A. Number: UN2582

Packing Group: III

D.O.T. Label: 8



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

OSHA Status: These items 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 Catagories: Acute: Yes Chronic, Fire, Pressure, Reactivity: 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. Hydrochloric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List. Hydrochloric Acid 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. Hydrochloric Acid - 5,000 pounds. Hydrochloric Acid - 5,000 pounds. Ferric Chloride Hexahydrate - 1000 pounds.

WHMIS: E: Corrosive Material.



Section 16. Other Information

NFPA Ratings:

Health: 2	Flammability: 0	Reactivity: 0	Special Notice Key:None

HMIS Ratings:

Health: 2	Flammability: 0	Reactivity: 0	Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 3-26-2001: (Section 1) removed catalog number 3109.
Rev 2, 10-09-2001: Reformatted to electronic data format.
Rev 3, 11-18-2002: (Section 1) added catalog number 9400.
Rev 4, 12-17-2003: (Section 1) added Solutions Plus catalog number F037040.
Rev 5, 04-01-05: (Section 1) revised title from 1-10%, added catalog number 3118 and SF037060; (Section 2) revised concentrations of Ferric Chloride and Hydrochloric Acid; (Section 7) revised storage code; (Section 14) revised DOT information from not regulated; (Section 15) revised Section 311 and WHMIS information; (Section 16) revised health ratings
from 1 to 2.
Rev 6, 11-9-07: (Section 1) added Red Bird catalog number F-305.
Rev 7, 03-14-2013: Reviewed and approved for distribution.
Rev 8, 09-09-2013: (Section 1) added catalog number R3107200.

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.