SAFETY DATA SHEET
FERRIC CHLORIDE, 29%, AQUEOUS

Section 1 - Chemical Product and Company Identification

SDS Name: Ferric Chloride, 29% Aqueous.
Catalog Numbers: SO-125A
Company Identification: ROWLEY BIOCHEMICAL
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883 Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

HEALTH HAZARDS

H302-Acute Oral Toxicity: 4
H312-Acute Dermal Toxicity: 4
H315-Skin Corrosion/Skin Irritation: 2
H318-Eye damage/Irritation: 1

PHYSICAL HAZARDS

H290-Corrosive to Metals: 1

ENVIRONMETAL HAZARDS

Aquatic acute environmental Hazards: Not classified
Chronic environmental Hazards: Not classified

Pictograms or Hazard symbols and Hazard statement.

Warning: Harmful if swallowed.
Causes skin irritation.
Harmful in contact with skin.
Danger: Cause serious eye damage.
Warning: May be corrosive to metal.

**Precautionary Statement Prevention.**

H302
P264 Wash thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P301 + P312 If swallowed, call a physician if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
P330 Rinse mouth.

H312
P280 Wear protective gloves, clothing, and eye and face protection.
P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.
P312 Call a physician if you feel unwell
P361 + P363 Take off immediately all contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

H315
P280 Wear protective gloves, clothing, and eye and face protection.
P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.
P332 + P313 If skin irritation occurs, get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

H318
P280 Wear eye and face protection.
P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.
P337 + P313 If eye irritation persists, get medical advice/attention.

H290
P234-Keep only in original container.
P390-Absorb spillage to prevent material damage.
P406-Store in corrosive resistant/container with a resistant inner liner
DANGER! Cause serious eye damage. Avoid contact with skin, eyes and clothing.

WARNING! Harmful in contact with skin. Harmful if swallowed. Do not eat, drink or smoke when using this product. Causes skin irritation. Wash thoroughly after handling. May be corrosive to metals. Keep only in original container.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7705-08-0</td>
<td>Ferric Chloride</td>
<td>29 w/v</td>
</tr>
<tr>
<td>7647-01-0</td>
<td>Hydrochloride Acid</td>
<td>1% v/v</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>100%v/v</td>
</tr>
</tbody>
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Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**Oral Exposure:** If Swallowing seek immediate medical advice.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.

**Extinguishing Media:** Use water spray, dry chemical powder, or appropriate foam.

**Flash Point:** N/A

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear protective gear.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.
Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Avoid contact with skin and eyes. Store capped at room temperature. Keep away from incompatible materials. Avoid contact with skin and eyes.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Amber colored

**Odor:** N/A

**pH:** 1.23-1.47

**Water**

**Vapor Pressure:** 2.3 KPa @20 deg. C

**Vapor Density:** 0.62 (Air=1)

**Boiling Point:** 100 deg. C (212 deg. F)

**Specific Gravity/Density:** 1 (water=1)

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Hazardous Decomposition Products:** Will not occur.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities with other materials:** heat, reactive with oxidizing agents.
Section 11 - Toxicological Information

**RTECS#:**

**LD50/LC50:**
CAS# 7705-08-0 LD50=900 mg/kg (Rat)

**Carcinogenicity:**
CAS# 7783-83-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Route of exposure:**
Avoid all routes of exposure including contact and inhalation.

**Conditions aggravated by exposure:**
The toxicological properties have not been thoroughly investigated

Section 12 - Ecological Information

**Ecotoxicity:**
CAS# 7705-08-0. Not available

Products of Biodegradation: Possible hazardous short term degradation products are not likely. However, long term degradation products may arise.

Section 13 - Disposal Considerations

**Appropriate method of disposal of substance or preparation:**
Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

**DOT**
Proper Shipping Name: Ferric Chloride (Corrosive)
Hazard class: 8
UN/NA: UN2582
Packing Group: 111

Section 15 - Regulatory Information

**Risk and Safety phrases**
R21/22 Harmful in contact with skin and if swallowed
S2 Keep out of the reach of children
**S24/25** Avoid contact with skin and eyes  
**S37/39** Wear suitable gloves and eye/face protection

US Classification and label test  
US Statements: Caution! Irritant to skin and eyes.

United States Regulatory Information  
SARA Listed: No  
Canada Regulatory Information  
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

DSL: no  
NDSL: no

**Section 16 - Additional Information**

**MSDS Creation Date:** 10/15/12  
**Revision #1.** 5/2/14 YM-Co-sign RC  
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