SAFETY DATA SHEET
WEIGERT’S IRON HEMATOXYLIN B

Section 1 - Chemical Product and Company Identification

SDS Name:  Weigert’s Iron Hematoxylin B
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

H301-Acute Oral Toxicity:  4
H332-Acute Inhalation Toxicity:  4
H312-Acute Dermal Toxicity:  4
H315-Skin Corrosion/Skin Irritation:  2
H373-Specific Target Organ Toxicity:  2

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 in contact with skin. Causes skin irritation.
Harmful if inhaled.
Harmful if swallowed
Warning: Causes eye irritation.

Chronic: Hydrochloric acid is slightly hazardous in case of skin contact as a sensitizer. Carcinogenic effects: classified 3 (not classifiable for human.) by IARC [Hydrochloric Acid]. Repeated or prolonged exposure to Hydrochloric Acid and Ferric Chloride can produce target organ damage. Repeated or prolonged exposure to Hydrochloric Acid and Ferric Chloride spray or mist may produce chronic eye irritation and severe skin irritation along with respiratory tract irritation leading to frequent attacks of bronchial infection. Ferric Chloride may affect genetic material through chronic exposure.

Precautionary Statement

H301
P405 Store locked up.
P330 Rinse mouth.
P301 + P310 If swallowed, immediately call a physician.
P270 Do not eat, drink, or smoke when using this product.
P264 Wash thoroughly after handling.

H332
P261 Avoid breathing fumes/mist/vapors.
P271 Use only outdoors or in a well-ventilated area.
P304 + P340 If inhaled, remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or physician if you feel unwell.

H315+H312
P264+Wash thoroughly after handling.
P280+Wear protective gloves.
P302+P352-IF ON SKIN: Wash with plenty of soap and water.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse.

H315
P260 Do not breathe fume/gas/mist/vapors.
P314 Get medical advice/attention if you feel unwell.

H320
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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! Toxic if swallowed. WARNING! Skin and eye irritant. Harmful if inhaled. May cause target organ damage through prolonged or repeated exposure. May be corrosive to metals. Keep in original container.
Section 3 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10025-77-1</td>
<td>Ferric Chloride Hexahydrate</td>
<td>1.16 w/v</td>
</tr>
<tr>
<td>7647-01-0</td>
<td>Hydrochloric Acid, Conc.</td>
<td>1.0 v/v</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>Balance</td>
</tr>
</tbody>
</table>

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: 1; 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. Store capped at room temperature. Keep away from incompatible materials.

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.

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid Conc.</td>
<td>N/A</td>
<td>5 ppm CEIL; 7 mg/m3 CEIL;</td>
<td>5 ppm CEIL; 7 mg/m3 CEIL;</td>
</tr>
<tr>
<td>Ferric Chloride Hexahydrate</td>
<td>1 mg/m3 TWA</td>
<td>1 mg/m3 TWA</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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:** Yellowish amber color  
**Odor:** Pungent. Irritating. (moderate.)  
**pH:** N/A

**water.**  
**Vapor Pressure:** 2.3 kPa @ 20°C  
**Vapor Density:** 0.62 (Air=1)  
**Evaporation Rate:** N/A  
**Viscosity:** N/A  
**Boiling Point:** 100°C  
**Solubility:** N/A

---

**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.  
**Conditions to Avoid:** Heat, freezing.  
**Incompatibilities with Other Materials:** Hydrochloric Acid is highly reactive with metals; also reactive with oxidizing agents, organic materials, alkalis, water.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes.  
**Hazardous Polymerization:** Will not occur.
Section 11 - Toxicological Information

**Routes of entry:** Absorbed through the skin. Dermal contact. Eye contact. Inhalation.

**RTECS#:** NO5425000, MW4025000

**LD50/LC50:**

CAS# 7647-01-0:
- Oral, Rabbit: LD50 = 900mg/kg
- Inhalation, Mouse: LC50 = 1108 ppm / 1 Hr
- Inhalation, Rat: LC50 = 3124 ppm / 1 Hr

**Carcinogenicity:**

CAS# 7647-01-0, 10025-77-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**RTECS#:**

**LD50/LC50:**

CAS# 7647-01-0:
- Oral, Rabbit: LD50 = 900mg/kg
- Inhalation, Mouse: LC50 = 1108 ppm / 1 Hr
- Inhalation, Rat: LC50 = 3124 ppm / 1 Hr

**Carcinogenicity:**

CAS# 7647-01-0, 10025-77-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Hydrochloric Acid and Ferric Chloride cause skin irritation and burns. Ferric Chloride has been infrequently associated with skin sensitization in humans. Both compounds have been known to cause eye irritation and burns. Higher exposures may lead to corneal or conjunctival ulceration and corneal necrosis. High concentrations of Hydrochloric Acid inhalation can be fatal. Inhalation of both compounds may cause laryngeal burning, irritation, pain and inflammation. High concentrations of Hydrochloric Acid may be fatal if swallowed. Both compounds may cause severe and permanent damage to the digestive tract. Chronic exposure to both compounds may produce general deterioration of health by an accumulation in one or many human organs.

**Mutagenicity:** Ferric Chloride is mutagenic for mammalian somatic cells.

Section 12 - Ecological Information

**CAS#:** 7647-01-0, 10025-77-1

**Ecotoxicity:** No information available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** No information available.

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
Non regulated

Section 15 - Regulatory Information

Canada Regulatory Information
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

European/International Regulations
European Labeling in Accordance with EC Directives

Risk Phrases:
R25 Toxic if swallowed.
R20/21 Harmful by inhalation and in contact with skin.
R36/37 Irritating to eyes and respiratory system.
R46 May cause heritable genetic damage.
R48 Danger of serious damage to health by prolonged exposure.

Safety Phrases:
S20/21 When using do not eat, drink or smoke.
S2 Keep out of the reach of children.
S7 Keep container tightly closed.
S3/9/49 Keep only in original container in a cool, well-ventilated place.
S24/25 Avoid contact with skin and eyes.
S23 Do not breathe gas/fumes/vapor/spray.
S46 If swallowed, seek medical advice immediately and show this container or label.

Section 16 - Additional Information

MSDS Creation Date: 10/15/12
Revision #1. CF 10/10/13
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.