ClearView™ Iron Hematoxylin, Solution B

1. Identification

Product Name: ClearView™ Iron Hematoxylin, Solution B  
Synonyms: N/A  
Recommended Use: Special Stain  
Restrictions on Use: N/A  
Manufacturer/Supplier: 
Avantik Biogroup  
32 Commerce Street  
Springfield, NJ 07081  
1-888-392-8411

2. Hazards Identification

OSHA Hazard Classification(s):  
Skin Corrosion - Category 1A  
Eye Damage - Category 1  
Signal Word: Danger  
Hazard Statement(s): Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary Statement(s): Prevention: Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection.

Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

3. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferric Chloride</td>
<td>Iron III Chloride</td>
<td>10025-77-1</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td>HCl</td>
<td>7647-01-0</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eye Contact: Corrosive to eyes. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: Corrosive to skin. If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

Ingestion: Corrosive to mouth, throat and stomach. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

Symptoms: Irritation eyes, nose, throat; headache, dizziness. Skin burns or dermatitis.

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.
ClearView™ Iron Hematoxylin, Solution B

5. Fire-Fighting Measures

**Extinguishing Media**: Dry chemical, carbon dioxide, alcohol foam, water.

**Fire Hazards (Chemical)**: Not flammable.

**Special Protective Equipment**: Fire fighters should use self-contained breathing apparatus and protective clothing.

**Precautions for Firefighters**: Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. Accidental Release Measures

**Emergency Procedures**: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

**Protective Equipment**: See section 8

**Environmental Precautions**: Prevent release to the environment by using barriers.

**Containment and Clean-Up Procedures**: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

**Handling**: Do not breathe vapors. Do not eat, drink or smoke when using this product.

**Storage**: Store locked up. Store in a well-ventilated place, keep cool. Store at room temperature. Keep lid tightly closed. Do not store in metal containers, may be corrosive to metals.

8. Exposure Controls/Personal Protection

**OSHA Permissible Exposure Limits (PELs)**:

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>5ppm</td>
</tr>
</tbody>
</table>

**ACGIH Threshold Limit Values (TLVs)**:

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</td>
<td>2ppm</td>
<td></td>
</tr>
<tr>
<td>Ferric Chloride</td>
<td>10025-77-1</td>
<td>1 mg(Fe)/m3</td>
<td></td>
</tr>
</tbody>
</table>

**Engineering Controls**: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

**Personal Protective Measures**: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

**Special PPE Requirements**: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

**Appearance**: Red/Brown, Liquid

**Molecular Weight**: N/A

**Molecular Formula**: N/A

**pH**: 1.2-1.5

**Boiling Point and Boiling Range**: N/A

**Melting Point/Freezing Point**: N/A

**Flash Point**: N/A

**Specific Gravity/Relative Density**: N/A

**Odor**: N/A

**Odor Threshold**: N/A

**Color**: Red/Brown

**Flammability (solid/gas)**: N/A

**Vapor Density**: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity
Reactivity:
Chemical Stability: Stable
Conditions of Stability/Instability: N/A
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information
Likely Routes of Exposure
   Eyes: Corrosive to eyes, may cause chemical burns, redness or permanent damage to cornea. May cause blindness.
   Skin: Corrosive to skin. May cause chemical burns, redness, dermatitis and pain.
   Inhalation: Dizziness, headache.
   Ingestion: Corrosive solution. May cause chemical burns in mouth, throat, stomach and digestive tract.

   Signs or Symptoms of Exposure: Nausea, headaches.
   Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
   Acute Toxicity (Numerical Measures): Hydrochloric Acid: LD50(oral, rat)=900 mg/kg; LC50(inhalation, mouse)=1108 ppm/1H; LC50(inhalation, mouse)=3940 mg/m3/30M
   Carcinogenicity (NTP, IARC, OSHA): Does not contain any known carcinogens.

12. Ecological Information
Ecotoxicity: Ecotoxicity: CAS 7647-01-0 Hydrochloric Acid Fish: LC50 (96 Hr) Mosquito Fish: 282 mg/L LC50(48Hr) Shrimp: 100-330 mg/L LC50 (48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Trout: 10 mg/L
Invertebrates: LC50(48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Shrimp: 100-330 mg/L
Persistence and degradability: N/A
Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A
Mobility in the soil: N/A
Adverse Environmental Effects: N/A

13. Disposal Considerations
Recommended Disposal Containers: Check with your local waste authorities.*
Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*
Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*
Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*
ClearView™ Iron Hematoxylin, Solution B

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN3264
UN Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, n.o.s., (Hydrochloric Acid)
Transport Hazard Class(es): 8
Packing Group Number: II
Environmental Hazards (IMDG code):
  Marine Pollutant: No
Transport in Bulk (IBC Code): N/A
Special Transport Precautions: N/A

15. Regulatory Information

OSHA:
DOT:
EPA:
CPSC:
### 16. Other Information

**Revision Date:** 12/19/2014

**NFPA**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td>COR</td>
</tr>
</tbody>
</table>

**National Fire Protection Association (USA) NFPA**

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Hazard</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>1</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td>COR</td>
</tr>
</tbody>
</table>

**HMIS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
</tbody>
</table>

**Hazardous Material Information System HMIS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>1</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
</tbody>
</table>

**Notice to Reader:**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.