1. Identification

Product Name: Periodic Acid, 0.5%
Synonyms: N/A
Recommended Use: Stains
Restrictions on Use: N/A
Manufacturer/Supplier:
Avantik
32 Commerce Street
Springfield, NJ 07081
(800) 783-9424

2. Hazards Identification

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

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.
Descriptions of Hazards not otherwise classified: N/A
Percent of mixture with unknown acute toxicity: N/A

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>Water</td>
<td></td>
<td>7732-18-5</td>
<td>99.5</td>
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<tr>
<td>Periodic Acid</td>
<td></td>
<td>10450-60-9</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eye Contact: 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: 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: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.
Symptoms: Severe burns to eyes and skin. Irritation nose, throat; headache, dizziness
Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell or have been exposed to eyes or skin.
5. Fire-Fighting Measures

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

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

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

**Precautions for Firefighters:** Firefighters should use self-contained breathing apparatus and protective clothing.

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. Corrosive material, may damage concrete, metal and other materials.

7. Handling and Storage

**Handling:** Do not breathe vapors. Do not eat, drink or smoke when using this product. Avoid skin and eye contact. Wash thoroughly after handling.

**Storage:** Store locked up. Store in a cool, well-ventilated place, keep out of sunlight. Do not store near combustible materials. Keep away from heat, sparks or flame. Keep container closed.

8. Exposure Controls/Personal Protection

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

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
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<tbody>
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**ACGIH Threshold Limit Values (TLVs):**

<table>
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<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></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:** Colorless, Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** 2.0-2.1

**Boiling Point and Boiling Range:** 100ºC

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

**Flash Point:** N/A

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

**Odor:** Pungent

**Odor Threshold:** N/A

**Color:** Colorless
Periodic Acid, 0.5%

- 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: Soluble in water.
- Decomposition Temperature: N/A

10. Stability and Reactivity

- Reactivity:
- Chemical Stability: Stable
- Conditions of Stability/Instability: Avoid ignition sources.
- 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: Strong reducing agents, strong bases, dimethyl sulfoxide, finely powdered metals, tetraethylammonium hydroxide, dimethyl sulfoxide (DMSO).
- 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: Causes serious eye burns. May cause permanent corneal opacification.
  - Skin: Causes serious skin burns. May cause skin rash (in milder cases), and cold, clammy skin with cyanosis or pale color.
  - Inhalation: May cause irritation to the respiratory tract with burning pain in the nose and throat. Causes chemical burns to the respiratory tract.
  - Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal burns. May cause perforation of the digestive tract, swelling of the throat, convulsions, and possible coma. May cause nausea, diarrhea and vomiting.

- Signs or Symptoms of Exposure: Nausea, changes in skin or eye to signal exposure.
- Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
- Acute Toxicity (Numerical Measures): N/A
- Carcinogenicity (NTP, IARC, OSHA): Not listed as a carcinogen.

12. Ecological Information

- Ecotoxicity:
- Persistence and degradability:
- Bioaccumulation Potential (octanol-water partition coefficient, BCF):
- Mobility in the soil:
- Adverse Environmental Effects:

13. Disposal Considerations

- Recommended Disposal Containers: Check with your local waste authorities*
Periodic Acid, 0.5%

**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.*

**Waste Stream:** Consult your local or regional authorities.*

<table>
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<tr>
<th>14. Transport Information</th>
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</thead>
<tbody>
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<td>UN Number:</td>
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<td>UN Proper Shipping Name:</td>
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<td>Transport Hazard Class(es):</td>
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<tr>
<td>Packing Group Number:</td>
</tr>
<tr>
<td>Environmental Hazards (IMDG code):</td>
</tr>
<tr>
<td>Marine Pollutant:</td>
</tr>
<tr>
<td>Transport in Bulk (IBC Code):</td>
</tr>
<tr>
<td>Special Transport Precautions:</td>
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<table>
<thead>
<tr>
<th>15. Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA:</td>
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<tr>
<td>DOT:</td>
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<td>EPA:</td>
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<td>CPSC:</td>
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16. Other Information

**Revision Date:** 12/10/2014

**NFPA**

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

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

- **Fire Hazard:**
  - Health: 1
  - Reactivity: 0
  - Specific Hazard: COR

**HMIS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
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<tbody>
<tr>
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<td>Flammability</td>
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<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
</tbody>
</table>

**Hazardous Material Information System HMIS**

- **Health:** 1
- **Flammability:** 0
- **Physical Hazard:** 0
- **Personal Protection:**

**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.
Hematoxylin PSV

1. Identification

Product Name: Hematoxylin PSV
Synonyms: N/A
Recommended Use: N/A
Manufacturer/Supplier: Avantik
32 Commerce Street
Springfield, NJ 07081
(800) 783-9424

Item #:
Restrictions on Use: N/A
In Case of Emergency:
Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

OSHA Hazard Classification(s):
- Skin Irritation - Category 2
- Eye Damage - Category 1
- Specific Target Organ Toxicity (repeated exposure) - Category 2
- Toxic to Reproduction - Category 2

Signal Word: Danger
Hazard Statement(s): Causes skin irritation. Causes serious eye damage. May cause damage to organs (kidneys) through prolonged or repeated exposure. Suspected of damaging fertility of the unborn child.

Pictogram(s):

Precautionary Statement(s): Prevention: Wash body thoroughly after handling. Wear protective gloves. Wear eye protection, face protection. Do not breathe dust, vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.

Response: If on skin: Wash with plenty of water. Specific treatment (see first aid section on this label). If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing Immediately call a doctor. Call a doctor if you feel unwell. If exposed or concerned: Get medical attention.

Storage: Store locked up.

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

Descriptions of Hazards not otherwise classified: N/A
Percent of mixture with unknown acute toxicity: N/A

3. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name</th>
<th>CAS #</th>
<th>Concentration %</th>
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</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
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<tr>
<td>Hematoxylin</td>
<td></td>
<td>517-28-2</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Aluminum Ammonium Sulfate</td>
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<td>7784-26-1</td>
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<tr>
<td>Ethylene Glycol</td>
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<td>107-21-1</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Glacial Acetic Acid</td>
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<td>64-19-7</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Dimethyl Sulfoxide</td>
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<td>67-68-5</td>
<td>Trade Secret</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td></td>
<td>57-55-6</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

4. First Aid Measures
Clearview™ Hematoxylin PSV

Eye Contact: 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: 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: 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. Long term exposure may have effects on kidneys.

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

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.


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, cool place.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
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</thead>
<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10ppm, 25 mg/m3</td>
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ACGIH Threshold Limit Values (TLVs):

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>ACGIH PEL TLV</th>
<th>ACGIH STEL</th>
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</thead>
<tbody>
<tr>
<td>Glacial Acetic Acid</td>
<td>64-19-7</td>
<td>10ppm, 25mg/m3</td>
<td>15ppm, 37 mg/m3</td>
</tr>
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</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: Dark Violet, Liquid

Molecular Weight: N/A

Molecular Formula: N/A

pH: N/A
Clearview™ Hematoxylin PSV

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: Dark Violet
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: Soluble in water
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: Irritation. May cause permanent damage.
   Skin: Irritation.
   Inhalation: Dizziness, headache. Irritation to nose, throat, mucous membranes and respiratory system.
   Ingestion: Nausea. May be harmful if swallowed.

   Signs or Symptoms of Exposure: Nausea.
   Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.
   Acute Toxicity (Numerical Measures): Ethylene Glycol: LD50 (oral, cat) = 1650 mg/kg ; Glacial Acetic Acid: LD50 (rabbit, skin) = 1060mg/kg ; Glacial Acetic Acid: LC50 (inhalation, mouse) = 5620 ppm/1H
   Carcinogenicity (NTP, IARC, OSHA): N/A

12. Ecological Information
Ecotoxicity: N/A
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.*
Waste Stream: Consult your local or regional authorities.*

14. Transport Information
UN Number: Not regulated.
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group Number:
Environmental Hazards (IMDG code):
  Marine Pollutant:
Transport in Bulk (IBC Code):
Special Transport Precautions:

15. Regulatory Information
OSHA:
DOT:
EPA:
CPSC:
16. Other Information

Revision Date: 12/10/2014

<table>
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<tr>
<th>NFPA</th>
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<tr>
<td><strong>Health</strong></td>
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<td><strong>Reactivity</strong></td>
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<td><strong>Specific Hazard</strong></td>
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<table>
<thead>
<tr>
<th>HMIS</th>
<th>Hazardous Material Information System HMIS</th>
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<td><strong>Health</strong></td>
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<tr>
<td><strong>Flammability</strong></td>
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<td><strong>Physical Hazard</strong></td>
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<tr>
<td><strong>Personal Protection</strong></td>
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</table>

Notice to Reader:
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Schiff Reagent

1. Identification

**Product Name:** Schiff Reagent

**Synonyms:** N/A

**Recommended Use:** Stains

**Restrictions on Use:** N/A

**Manufacturer/Supplier:** Avantik

32 Commerce Street
Springfield, NJ 07081
(800) 783-9424

**In Case of Emergency:**

Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

**OSHA Hazard Classification(s):**
- Skin Corrosion - Category 1C
- Eye Damage - Category 1
- Germ Cell Mutagenicity - Category 1B
- Carcinogenicity - Category 2

**Signal Word:** Danger

**Hazard Statement(s):** Causes severe skin burns and eye damage. Causes serious eye damage. May cause genetic defects. Suspected of causing cancer.

**Pictogram(s):**

**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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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 If exposed or concerned: Get medical attention.

Storage: Store locked up.

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

**Percent of mixture with unknown acute toxicity:** N/A

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>Water</td>
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<td>7732-18-5</td>
<td>Trade Secret</td>
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<td>Hydrochloric Acid</td>
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<td>Pararosaniline HCl</td>
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<td>569-61-9</td>
<td>Trade Secret</td>
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</table>

4. First Aid Measures

**Eye Contact:** 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:** 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:** 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

**Recommendations for immediate medical care/special treatment:** Get medical advice/attention if you feel unwell.

### 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 dark container in refrigerator. Keep lid tightly closed. Keep out of sunlight.

### 8. Exposure Controls/Personal Protection

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

<table>
<thead>
<tr>
<th>Reagent</th>
<th>CAS #</th>
<th>OSHA PEL TWA</th>
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</thead>
<tbody>
<tr>
<td>Hydrochloric Acid</td>
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**ACGIH Threshold Limit Values (TLVs):**

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</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:** Colorless, Liquid

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** N/A

**Boiling Point and Boiling Range:** 100°C

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

**Flash Point:** N/A

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

**Odor:** Pungent odor
### Schiff Reagent

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor Threshold</td>
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<tr>
<td>Color</td>
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</tr>
<tr>
<td>Flammability (solid/gas)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Upper/Lower flammability or explosive limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### 10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td></td>
</tr>
<tr>
<td>Chemical Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions of Stability/Instability</td>
<td>Stable under normal conditions of temperature and pressure.</td>
</tr>
<tr>
<td>Stabilizers needed</td>
<td>None</td>
</tr>
<tr>
<td>Safety issue indicated by appearance change</td>
<td>N/A</td>
</tr>
<tr>
<td>Other</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazardous Reactions</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Does not occur</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>N/A</td>
</tr>
<tr>
<td>Classes of Incompatible Materials</td>
<td>Oxidizers, Strong Acids, Strong Bases</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (i.e. Carbon monoxide) may be released in a fire. Hydrogen chloride gas, sodium/sodium oxides, nitrogen oxides, sulfur oxides.</td>
</tr>
</tbody>
</table>

#### 11. Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely Routes of Exposure</td>
<td></td>
</tr>
<tr>
<td>Eyes</td>
<td>Corrosive to eyes, may cause permanent damage. Irritation with redness, pain and possible corneal damage.</td>
</tr>
<tr>
<td>Skin</td>
<td>Corrosive to skin, may cause irritation or permanent damage with redness and pain.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation of the mucous membranes with sore throat and coughing. Repeat exposure may affect select organs, increase risk of germ cell mutagenicity and risk of cancer.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Toxic by ingestion, consult a physician. Possible damage to gastrointestinal tract and diarrhea.</td>
</tr>
<tr>
<td>Signs or Symptoms of Exposure</td>
<td>Nausea. Cancer, germ cell mutagenicity, damage to organs.</td>
</tr>
<tr>
<td>Effects from short term exposure (delayed, immediate, chronic)</td>
<td>Irritation to the eyes, nose, throat; headache, dizziness, nausea.</td>
</tr>
<tr>
<td>Acute Toxicity (Numerical Measures)</td>
<td>Hydrochloric Acid: LD50(oral, rat)=900 mg/kg; LC50(inhalation, mouse)=1108 ppm/1H; LC50(inhalation, mouse)=3940 mg/m3/30M.</td>
</tr>
<tr>
<td>Carcinogenicity (NTP, IARC, OSHA)</td>
<td>Contains Basic Fuchsin CAS 569-61-9: IARC Group 2B, possibly carcinogenic to humans</td>
</tr>
</tbody>
</table>

#### 12. Ecological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>Ecotoxicity: CAS 7647-01-0 Hydrochloric Acid Fish: LC50 (96 Hr) Mosquito Fish: 282 mg/L LC100(24Hr) Trout: 10 mg/L Invertebrates: LC50(48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Shrimp: 100-330 mg/L</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>N/A</td>
</tr>
<tr>
<td>Bioaccumulation Potential (octanol-water partition coefficient, BCF)</td>
<td>N/A</td>
</tr>
<tr>
<td>Mobility in the soil</td>
<td>N/A</td>
</tr>
<tr>
<td>Adverse Environmental Effects</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### 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.*

**Waste Stream:** Consult your local or regional authorities.*

### 14. Transport Information

**UN Number:** Not regulated.

**UN Proper Shipping Name:**

**Transport Hazard Class(es):**

**Packing Group Number:**

**Environmental Hazards (IMDG code):**

**Marine Pollutant:**

**Transport in Bulk (IBC Code):**

**Special Transport Precautions:**

### 15. Regulatory Information

**OSHA:** N/A

**DOT:** N/A

**EPA:** N/A

**CPSC:** N/A
16. Other Information

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td></td>
</tr>
</tbody>
</table>

National Fire Protection Association (USA) NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Specific Hazard</td>
<td></td>
</tr>
</tbody>
</table>

Hazardous Material Information System HMIS

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</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.