

## Schiff Reagent

### 1. Identification

**Product Name:** Schiff Reagent

**Item #:** RS4450-250, 500

**Synonyms:** N/A

**Recommended Use:** Stains

**Restrictions on Use:** N/A

**Manufacturer/Supplier:**

**In Case of Emergency:**

Avantik

Chemtec US 1-800-424-9300

19 Chapin Road - Building C

Chemtec International 703-527-3887

Pine Brook, NJ 07058

800-783-9424

### 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.

**Descriptions of Hazards not otherwise classified:** N/A

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

### 3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Water		7732-18-5	Trade Secret
Hydrochloric Acid		7647-01-0	Trade Secret
Potassium Metabisulfite		16731-55--8	Trade Secret
Pararosaniline HCl		569-61-9	Trade Secret

### 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.

## Schiff Reagent

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):**

Reagent	CAS #	OSHA PEL TWA
Hydrochloric Acid	7647-01-0	5 ppm (7 mg/m <sup>3</sup> ) Ceiling

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

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Hydrochloric Acid	7647-01-0	2 ppm (3 mg/m <sup>3</sup> ) Ceiling	

**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

**Odor Threshold:** N/A  
**Color:** Colorless  
**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:** Stable under normal conditions of temperature and pressure.  
**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. Hydrogen chloride gas, sodium/sodium oxides, nitrogen oxides, sulfur oxides.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Corrosive to eyes, may cause permanent damage. Irritation with redness, pain and possible corneal damage.  
**Skin:** Corrosive to skin, may cause irritation or permanent damage with redness and pain.  
**Inhalation:** 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.  
**Ingestion:** Toxic by ingestion, consult a physician. Possible damage to gastrointestinal tract and diarrhea.

**Signs or Symptoms of Exposure:** Nausea. Cancer, germ cell mutagenicity, damage to organs.  
**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/m<sup>3</sup>/30M.  
**Carcinogenicity (NTP, IARC, OSHA):** Contains Basic Fuchsin CAS 569-61-9: IARC Group 2B, possibly carcinogenic to humans

### 12. Ecological Information

**Ecotoxicity:** 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  
**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

## Schiff Reagent

### 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

## Schiff Reagent

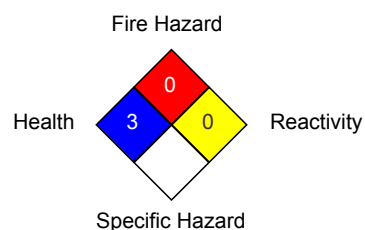
### 16. Other Information

**Revision Date:** 04/01/2015

#### NFPA

Health	3
Fire Hazard	0
Reactivity	0
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	3
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.*