Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Schiff's Reagent

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25794

Recommended uses of the product and restrictions on use: Laboratory chemicals

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724) 517-1954

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Health hazard
Carcinogenicity, category 2

Irritant
Acute toxicity (oral, dermal, inhalation), category 4
Eye irritation, category 2A
Skin irritation, category 2

Carc. 2.
Skin Irrit. 2.
Eye Irrit. 2A.

Signal word: Warning

Hazard statements:

Suspected of causing cancer.
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wash skin thoroughly after handling.
Use personal protective equipment as required.
Wear protective gloves/protective clothing/eye protection/face protection.

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF exposed or concerned: Get medical advice/attention.
IF ON SKIN: Wash with soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
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.
Store locked up.
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 632-99-5	Basic Fuchsin	0.1 %
CAS 7681-57-4	Sodium Meta-Bisulfite, ACS	1.8 %
CAS 7647-01-0	Hydrochloric Acid, ACS	0.91 %
CAS 7440-44-0	Charcoal, Decolorizing	0.05 %
CAS 7732-18-5	Deionized Water	97.14 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use spark-proof tools and explosion-proof equipment. Ensure that air-handling systems are operational. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be released into environment.

Methods and material for containment and cleaning up:

Keep in suitable closed containers for disposal. Wear protective eyeware, gloves, and clothing. Always obey local regulations. Refer to Section 8. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Collect solids in powder form using vacuum with HEPA filter. Evacuate personnel to safe areas.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Minimize dust generation and accumulation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. Protect from freezing and physical damage. Keep away from food and beverages. Store locked up. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store in cool, dry conditions in well sealed containers. Store with like hazards.

SECTION 8: Exposure controls/personal protection

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent



Control parameters:

, , OSHA PEL TWA (Total Dust) 15 mg/m3 (50 mppcf*).
, , ACGIH TLV TWA (inhalable particles) 10 mg/m3.
7647-01-0, NIOSH , 5 ppm Ceiling; 7 mg/m3 Ceiling.
7647-01-0, NIOSH , 50 ppm IDLH.
7647-01-0, OSHA PEL, 5 ppm Ceiling; 7 mg/m3 Ceiling.
7647-01-0, ACGIH TLV-TWA, 5 mg/m3 TWA.
7681-57-4, ACGIH TLV-TWA, 5 mg/m3.
7681-57-4, NIOSH TWA, 5 mg/m3.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Normal ventilation is adequate.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Strong disagreeable sulfur dioxide odor	**Vapor pressure at 20°C**:	Not determined
Odor threshold:	Not determined	**Vapor density**:	Not determined
pH-value:	Not determined	**Relative density**:	Not determined
Melting/Freezing point:	Not determined	**Solubilities**:	Slightly in water.

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

Boiling point/Boiling range:	Not determined	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not determined	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	Not determined	**Decomposition temperature**:	Not determined
Flammability (solid, gaseous):	Not determined	**Viscosity**:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible Materials. Dust generation.

Incompatible materials:

Strong acids. Oxidizing agents.

Hazardous decomposition products:

Nitrogen oxides. Carbon oxides. Hydrogen sulfide. By heating and fire, harmful vapors/gases may be formed.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Rabbit >5010 mg/kg 7647-01-0.

Chronic Toxicity: No additional information.
Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.
Carcinogenicity:

IARC -: Group 2B (Possibly Carcinogenic to Humans) Monograph 99 [2010] ; Monograph 57 [1993] (632-99-5-listed under Magenta: mixtures composed of CI Basic Red 9 or methyl fuchsin or dimethyl fuchsin or trimethyl fuchsin)

IARC -: Group 3 (Not Classifiable) Monograph 54 [1992] (7647-01-0 Hydrochloric acid)

IARC -: Group 3 (Not Classifiable) Monograph 54 [1992] (7681-57-4 listed under Sulfur dioxide and some sulfites bisulfites and metabisulfites)

Germ cell mutagenicity:

Basic violet 14 was found to be positive when tested for mutagenicity using the Salmonella/microsome

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

Reproductive Toxicity: No additional information.
STOT-single and repeated exposure: No additional information.
Additional toxicological information: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Fish LC50 - Oryzias latipes - 4.3 mg/l - 48 h, 632-99-5 (Fuchsin Basic).
Fish (acute 7681-57-4), 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static].
Algae (acute 7681-57-4), 72 Hr EC50 Desmodesmus subspicatus: 48 mg/L; 96 Hr EC50 Desmodesmus subspicatus: 40 mg/L.

Persistence and degradability:

Readily biodegradable.

Bioaccumulative potential:

Not expected to bio accumulate.

Mobility in soil:

Not Determined.

Other adverse effects:

None identified.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA — Not Regulated.

Limited Quantity Exception: — None

Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Not Regulated.
Hazard Class: None
Packing Group: Not Regulated.
Marine Pollutant (if applicable): No additional information.
Comments: None

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7647-01-0 Hydrochloric acid 5000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0
HMIS: 2-0-0
GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 10.24.2014

Schiff's Reagent

IATA International Air Transport Association.
GHS Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH American Conference of Governmental Industrial Hygienists.
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).
PNEC. Predicted No-Effect Concentration (REACH).
CFR Code of Federal Regulations (USA).
SARA Superfund Amendments and Reauthorization Act (USA).
RCRA. Resource Conservation and Recovery Act (USA).
TSCA. Toxic Substances Control Act (USA).
NPRI National Pollutant Release Inventory (Canada).
DOT US Department of Transportation.