

## Schiff Reagent

### 1. Identification

**Product Name:** Schiff Reagent

**Item #:** FX2109, FX2109-GAL, SSC1117

**Synonyms:** N/A

**Recommended Use:** Stains

**Restrictions on Use:** N/A

**Manufacturer/Supplier:**
**In Case of Emergency:**

Cancer Diagnostics, Inc.

Chemtrec US 1-800-424-9300

116 Page Point Circle

Infotrac International 1-352-323-3500

Durham, NC 27703

1-877-846-5393

### 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. P0

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	≤1
Potassium Metabisulfite		16731-55--8	≤2
Pararosaniline HCl		569-61-9	≤0.5

### 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:** 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. 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

<b>14.1 UN Number DOT, IATA,IMDG, ADR</b>	DOT: Not Regulated for Transport by DOT. ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA.
<b>14.2 UN Proper Shipping Name DOT, IATA,IMDG, ADR</b>	ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA. DOT: Not Regulated for Transport by DOT.
<b>14.3 Transport Hazard Class(es)</b>	DOT: Not Regulated for Transport by DOT. IATA: Not Regulated for Transport by IATA. IMDG: Not Regulated for Transport by IMDG. ADR/RID: Not Regulated for Transport by ADR/RID.
<b>14.4 Packing Group DOT, IATA,IMDG, ADR</b>	ADR/RID: Not Regulated for Transport by ADR/RID. IMDG: Not Regulated for Transport by IMDG. IATA: Not Regulated for Transport by IATA. DOT: Not Regulated for Transport by DOT.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.

### 15. Regulatory Information

OSHA:

DOT:

EPA:

CPSC:

## Schiff Reagent

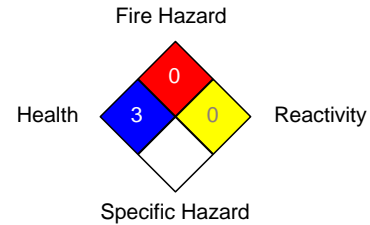
### 16. Other Information

**Revision Date:** 2019-01-11

#### 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:

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## Modified Mayer's Hematoxylin

### 1. Identification

**Product Name:** Modified Mayer's Hematoxylin

**Item #:** SSC1059-125

**Synonyms:** PureView™ Mayer's, Lillie's Modification

**Recommended Use:** N/A

**Restrictions on Use:** N/A

**Manufacturer:**

 Cancer Diagnostics, Inc.  
 116 Page Point Circle  
 Durham, NC 27703  
 1-877-846-5393

**In Case of Emergency:**

 Chemtrec US 1-800-424-9300  
 Infotrac International 1-352-323-3500

### 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: Disposal 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
Hematoxylin		517-28-2	Trade Secret
Aluminum Ammonium Sulfate		7784-26-1	Trade Secret
Ethylene Glycol		107-21-1	Trade Secret
Glacial Acetic Acid		64-19-7	Trade Secret
Dimethyl Sulfoxide		67-68-5	Trade Secret
Propylene Glycol		57-55-6	Trade Secret

### 4. First Aid Measures

## Modified Mayer's Hematoxylin

**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.

**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, cool place.

### 8. Exposure Controls/Personal Protection

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

Reagent	CAS #	OSHA PEL TWA
Glacial Acetic Acid	64-19-7	10ppm, 25 mg/m3

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

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Glacial Acetic Acid	64-19-7	10ppm, 25mg/m3	15ppm, 37 mg/m3

**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



## Modified Mayer's Hematoxylin

**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



## Modified Mayer's Hematoxylin

**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:**

## Modified Mayer's Hematoxylin

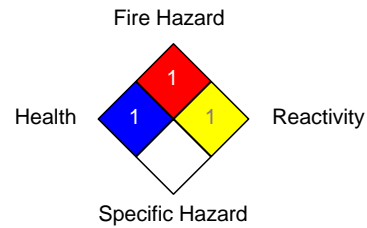
### 16. Other Information

Revision Date: 2019-01-11

#### NFPA

Health	1
Fire Hazard	1
Reactivity	1
Specific Hazard	

National Fire Protection Association (USA) NFPA



#### HMIS

Health	1
Flammability	1
Physical Hazard	1
Personal Protection	

Hazardous Material Information System HMIS

Health	1
Flammability	1
Physical Hazard	1
Personal Protection	

#### Notice to Reader:

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## Periodic Acid, 0.5%

### 1. Identification

**Product Name:** Periodic Acid, 0.5%

**Item #:** FX2108, SSC1102

**Synonyms:** N/A

**Recommended Use:** Stains

**Manufacturer:**

Cancer Diagnostics, Inc.  
116 Page Point Circle  
Durham, NC 27703  
1-877-846-5393

**Restrictions on Use:** N/A

**In Case of Emergency:**

Chemtec US 1-800-424-9300  
Infotrac International 1-352-323-3500

### 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

Chemical Name	Common Name	CAS #	Concentration %
Water		7732-18-5	99.5
Periodic Acid		10450-60-9	0.5%

### 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

## Periodic Acid, 0.5%

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

**Precautions for Firefighters:** Fire fighters 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):

Reagent	CAS #	OSHA PEL TWA
N/A		

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

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
N/A			

**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:** 100°C

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

**Flash Point:** N/A

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

**Odor:** Pungent

## Periodic Acid, 0.5%

**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:** 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:**

## Periodic Acid, 0.5%

### 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:**

**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:**

## Periodic Acid, 0.5%

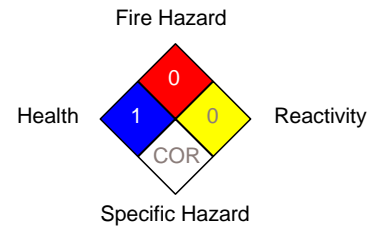
### 16. Other Information

**Revision Date:** 2019-01-11

#### NFPA

Health	1
Fire Hazard	0
Reactivity	0
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



#### HMIS

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	

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## Diastase

### 1. Identification

**Product Name:** Diastase

**Item #:** SSC1139

**Synonyms:** Amylase, Diastase of Malt, Maltin

**Recommended Use:** Laboratory Reagent

**Restrictions on Use:** Any use other than recommended

**Manufacturer:**

**In Case of Emergency:**

Cancer Diagnostics, Inc.

Chemtec US 1-800-424-9300

116 Page Point Circle

Infotrac International 1-352-323-3500

Durham, NC 27703

1-877-846-5393

### 2. Hazards Identification

**OSHA Hazard Classification(s):**

Sensitization - Respiratory - Category 1B

Sensitization - Skin - Category 1B

**Signal Word:** Danger

**Hazard Statement(s):** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Pictogram(s):**



**Precautionary Statement(s):** Prevention: Avoid breathing dust, vapors. Wear NIOSH approved respiratory protection. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.

Response: If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a doctor. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Specific treatment (see first aid section on this label). Take off all contaminated clothing and wash it before reuse.

Storage: N/A

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 %
Diastase	Amylase	9000-92-4	100

### 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

## Diastase

**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 in a well-ventilated place. Keep cool. Keep lid tightly closed. Keep away from incompatible materials (see section 10 for incompatibilities). Hygroscopic.

### 8. Exposure Controls/Personal Protection

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

Reagent	CAS #	OSHA PEL TWA
N/A		

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

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
N/A			

**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:** Beige, Powder

**Molecular Weight:** N/A

**Molecular Formula:** N/A

**pH:** N/A

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

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

**Flash Point:** N/A

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

**Odor:** Characteristic

**Odor Threshold:** N/A

**Color:** Beige

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

**Vapor Density:** N/A

**Upper/Lower flammability or explosive limits:** N/A

**Vapor Pressure:** N/A

## Diastase

**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:** Not Reactive  
**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.

### 11. Toxicological Information

#### Likely Routes of Exposure

**Eyes:** Irritation.  
**Skin:** Irritation. Prolonged or repeated exposure may cause allergic reaction in certain sensitive individuals.  
**Inhalation:** Dizziness, headache. Prolonged or repeated exposure may cause allergic reaction in certain sensitive individuals.  
**Ingestion:** Nausea.

**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):** N/A  
**Carcinogenicity (NTP, IARC, OSHA):** Not listed as a carcinogen.

### 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



## Diastase

**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

# Diastase

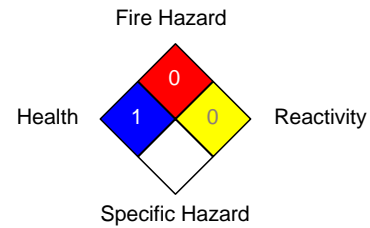
## 16. Other Information

**Revision Date:** 2019-01-11

### NFPA

Health	1
Fire Hazard	0
Reactivity	0
Specific Hazard	

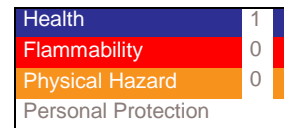
National Fire Protection Association (USA) NFPA



### HMIS

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS



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