

# Cryo-Bluing™

## 1. Identification

**Product Name:** Cryo-Bluing™

**Item #:** ST0003, ST0004

**Synonyms:** Frozen Section Bluing Solution

**Recommended Use:** N/A

**Restrictions on Use:** N/A

**Manufacturer:**
**In Case of Emergency:**

 Cancer Diagnostics, Inc.  
 4300 Emperor Blvd. #400  
 Durham, NC 27703  
 1-877-846-5393

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

## 2. Hazards Identification

**OSHA Hazard Classification(s):**

 Toxic to Reproduction - Category 2  
 Skin Irritation - Category 2  
 Eye Irritation - Category 2B

**Signal Word:** Warning

**Hazard Statement(s):** Suspected of damaging fertility of the unborn child. Causes skin irritation. Causes eye irritation.

**Pictogram(s):**

**Precautionary Statement(s):** Prevention: 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. Wash body thoroughly after handling. Wear protective gloves.

Response: If exposed or concerned: Get medical attention. 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 If eye irritation persists: 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
Lithium Carbonate		554-13-2	
Select Preservative		Trade Secret	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. 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.

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**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:** 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.

### 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. Keep lid tightly 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:** 10.9-11.1

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

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

**Flash Point:** N/A

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

**Odor:** N/A

**Odor Threshold:** N/A

**Color:** Colorless

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

## Cryo-Bluing™

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: Miscible in water.  
Decomposition Temperature: N/A

### 10. Stability and Reactivity

Reactivity: N/A  
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 temporary corneal damage. Very basic solution.  
**Skin:** Irritation. May cause skin damage or redness. Very basic solution.  
**Inhalation:** Dizziness, headache.  
**Ingestion:** Nausea. May cause irritation to mouth, throat, stomach and gastrointestinal tract.

**Signs or Symptoms of Exposure:** Nausea. Irritation, headaches.

**Effects from short term exposure (delayed, immediate, chronic):** Irritation to the eyes, nose, throat; headache, dizziness, nausea.

**Acute Toxicity (Numerical Measures):** Lithium Carbonate: LD50(oral,rabbit)=404 mg/kg, LD50(oral,dog)=500 mg/kg

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

### 12. Ecological Information

**Ecotoxicity:** Lithium Carbonate: Toxicity to fish: LC50-Oncorhynchus mykiss (rainbow trout)-30.3mg/l-96H Toxicity to daphnia and other aquatic invertebrates: EC50-Daphnia magna (Water flea)-33.2 mg/l-48H Toxicity to algae-static test EC50-Desmodesmus subspicatus (green algae)->400mg/l-72H

**Persistence and degradability:** N/A

**Bioaccumulation Potential (octanol-water partition coefficient, BCF):** N/A

**Mobility in the soil:** N/A

**Adverse Environmental Effects:** Harmful to aquatic life.

### 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.\*

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**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:**

**Cryo-Bluing™**

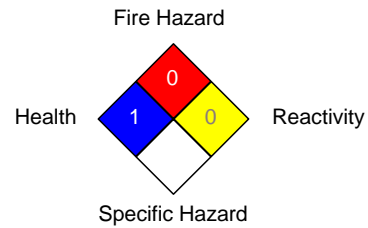
**16. Other Information**

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

**NFPA**

Health	1
Fire Hazard	0
Reactivity	0
Specific Hazard	

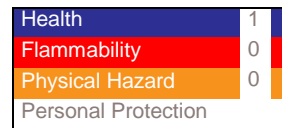
National Fire Protection Association (USA) NFPA



**HMIS**

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS



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