

1. Identification

Product Name: Silver Nitrate (Acidulated), 2%

Synonyms: Silver Nitrate Solution

Recommended Use: Laboratory Reagent

Manufacturer: Cancer Diagnostics, Inc. 4300 Emperor Blvd. #400 Durham, NC 27703 1-877-846-5393 Item #: SSC1119

Restrictions on Use: Any use other than recommended

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 Irritation - Category 2A **Signal Word:** Warning

Hazard Statement(s): Causes skin irritation. Causes serious eye irritation.

Pictogram(s):



**Precautionary Statement(s):** Prevention: Wash body thoroughly after handling. Wear protective gloves. Wear eye protection, 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 If eye irritation persists: Get medical attention.

Storage: N/A

Disposal: N/A

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 %
Silver Nitrate		7761-88-8	2
Water		7732-18-5	98
Select Buffering Agents		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.

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 in a well-ventilated place. Keep cool. Keep lid tightly closed. Store in refrigerator. Keep out of sunlight.

## 8. Exposure Controls/Personal Protection

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

Reagent	CAS#	OSHA PEL TWA
Silver Nitrate	7761-88-8	0.01 mg/m3 TWA (as Ag)

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

Reagent	CAS#	ACGIH PEL TLV	ACGIH STEL
Silver Nitrate	7761-88-8	0.01 mg/m3 TWA (as Ag)	

**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:** 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: 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: 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: Exposure to light causes solution to yellow.

Other: N/A

Hazardous Reactions: N/A

Hazardous Polymerization: Does not occur Conditions to avoid: Exposure to light.

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 burns or permanent damage to cornea. **Skin:** Irritation. May cause redness, pain, burns or damage to skin.

Inhalation: Dizziness, headache.

Ingestion: Nausea. May cause burns of the mouth, throat and stomach. Can cause sore throat, vomiting, diarrhea. Poison.

Signs or Symptoms of Exposure: Nausea. Loss of appetite, inability to concentrate. Headache.

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

Acute Toxicity (Numerical Measures): Silver Nitrate: Oral rat LD50: 1173 mg/kg; Oral guinea pig LD50 473 mg/kg; Oral rabit

LD50 800 mg/kg

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: Acute toxicity 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.\*

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):

## 15. Regulatory Information

**Special Transport Precautions:** 

OSHA: DOT: EPA: CPSC:



## 16. Other Information

Revision Date: 05/16/2018

## **NFPA**

Health	2
Fire Hazard	0
Reactivity	0
Specific Hazard	

## National Fire Protection Association (USA) NFPA



## **HMIS**

Health	2
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS



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