

SECTION 1: IDENTIFICATION

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| PRODUCT IDENTIFIER: | Silver Nitrate 0.0282N Solution |
| OTHER MEANS OF IDENTIFICATION: | None |
| RECOMMENDED USE: | Laboratory reagent |
| RESTRICTIONS ON USE: | None known |
| SUPPLIER IDENTIFIER: | Di-Corp 8750-53 Ave Edmonton, AB T6E 5G2 780-440-4923 |
| EMERGENCY PHONE NUMBER 24hr: | 780-468-4064 |
| EMERGENCY TRANSPORT NUMBER: | 1-888-CANUTEC (226-8832), 613-996-6666 or *666 on a cellular phone |

SECTION 2: HAZARD IDENTIFICATION

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| CLASSIFICATION: | Not classified according to Part 2 of HPR. |
| LABEL SYMBOLS: | Not available |
| SIGNAL WORD: | Not available |
| CLASSIFICATION INFORMATION: | Not available |
| OTHER HAZARDS: | Not available |
| PRECAUTIONARY STATEMENTS: | Not available |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL NAME | CAS NUMBER | CONCENTRATION |
|------------------|------------|---------------|
| Silver Nitrate | 7761-88-8 | 0.48% (w/v) |
| Propylene Glycol | 57-55-6 | 20% (v/v) |

SECTION 4: FIRST AID MEASURES

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| SKIN CONTACT: | As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately flush with lukewarm, gently flowing water for at least 15 minutes. If irritation develops and persists, obtain medical attention. |
| EYE CONTACT: | Immediately flush with gently flowing warm water for minimum 15 minutes. Hold eyelids open to ensure thorough flushing. Obtain medical attention when flushing is complete and no further irritation is felt. |
| INGESTION: | Do not induce vomiting. Rinse mouth thoroughly with water and give large quantity of water or milk to drink. If spontaneous vomiting occurs keep head below hips to prevent aspiration of the vomit into the lungs; have victim rinse mouth with water again. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing. |
| INHALATION: | If inhaled remove person to fresh air and keep comfortable for breathing. Obtain immediate medical attention. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. |
| MOST IMPORTANT SYMPTOMS / EFFECTS: | Will stain the skin. |
| IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT | Flush with water immediately if product contacts the eyes or skin. |

SECTION 5: FIRE-FIGHTING MEASURES

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| SUITABLE EXTINGUISHING MEDIA: | Use media appropriate for packaging and surrounding materials. |
| UNSUITABLE EXTINGUISHING MEDIA: | Not available. |

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| SPECIFIC FIRE HAZARDS: | If solvents evaporate during a fire the remaining silver nitrate is an oxidizer and can contribute oxygen to the fire during decomposition. Flush area with flooding quantities of water. |
| HAZARDOUS COMBUSTION PRODUCTS: | Oxides of nitrogen and oxygen are possible during thermal decomposition. |
| SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS: | Self-contained breathing apparatus required for fire-fighting personnel. Move containers from fire area, or cool with water spray, if possible. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use appropriate safety equipment. Do not flush to environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Soak up spills with noncombustible (inorganic) absorbent material. Collect in appropriate containers for disposal as hazardous waste. Rinse spill area thoroughly with water.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Wear personal protective equipment. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid ingestion. Discard contaminated non-rubber shoes. Discard contaminated leather articles (belts, watchbands, etc). Wash clothing before reuse.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Light sensitive. Store in cool, dark area away from incompatibles. To prevent staining, wash all equipment thoroughly when handling is completed. Keep container tightly closed and properly labelled. Store unused material in original container. Empty packages contain residual hazardous material and should be handled as if full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

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| EXPOSURE LIMITS: | Silver Nitrate: ACGIH TLV-TWA = 0.01 mg/m ³ (ceiling) |
| ENGINEERING CONTROLS: | Not required under normal conditions of use. If user operations generate vapour or mist use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure below limits. Ensure ventilation equipment is corrosion resistant and separate from other exhaust ventilation systems. |
| PERSONAL PROTECTIVE MEASURES | |
| RESPIRATORY PROTECTION: | Use a properly fitted particulate filter respirator complying with an approved standard if airborne concentrations exceeds TLV or if a risk assessment indicates this is necessary. |
| PROTECTIVE GLOVES: | Wear latex or rubber gloves when handling. |
| EYE PROTECTION: | Wear safety glasses with side shields at a minimum. Do not wear contact lenses. |
| OTHER PROTECTIVE EQUIPMENT (SPECIFY): | Protective clothing as required to prevent contact. Ensure eye-wash station and emergency shower are available. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| APPEARANCE: | Clear colourless liquid |
| ODOUR: | Odourless |
| ODOUR THRESHOLD: | Not applicable |
| pH: | 5.5 |
| MELTING POINT / FREEZING POINT: | <-10°C |
| BOILING POINT / RANGE: | >100°C |
| FLASH POINT: | Not applicable |
| EVAPORATION RATE: | Not available |
| FLAMMABILITY: | Not applicable |

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| FLAMMABILITY / EXPLOSIVE LIMITS: | Not applicable |
| VAPOUR PRESSURE: | Not available |
| VAPOUR DENSITY: | Not available |
| RELATIVE DENSITY: | 1.02 |
| SOLUBILITY: | Miscible in water |
| PARTITION COEFFICIENT: | Not available |
| AUTO-IGNITION TEMPERATURE: | Not applicable |
| DECOMPOSITION TEMPERATURE: | Not applicable |
| VISCOSITY: | Not applicable |

SECTION 10: STABILITY AND REACTIVITY

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| REACTIVITY: | Sensitive to light. |
| CHEMICAL STABILITY: | Stable under recommended storage conditions. |
| POSSIBILITY OF HAZARDOUS REACTIONS: | Will not polymerize. |
| CONDITIONS TO AVOID: | Avoid contact with incompatible materials and exposure to light. |
| INCOMPATIBLE MATERIALS: | Incompatible with organic materials, ammonium hydroxide, alcohols, stannous chloride, reducing agents and water reactive materials. |
| HAZARDOUS DECOMPOSITION PRODUCTS: | Nitrogen oxides and oxygen may result from thermal decomposition. |

SECTION 11: TOXICOLOGICAL INFORMATION

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| PRODUCT TOXICITY: | Not available |
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COMPONENT TOXICITY

| INGREDIENT NAME | LD50 Oral | LD50 Dermal | LC50 Inhal |
|------------------|------------------|---------------|---------------|
| Silver Nitrate | 1173 mg/kg (rat) | Not available | Not available |
| Propylene Glycol | 20 g/kg (rat) | Not available | Not available |

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| SKIN CONTACT: | Contact with liquid can cause staining. Prolonged contact may cause irritation. |
| EYE CONTACT: | May cause irritation. |
| INGESTION: | May cause abdominal pain, gastroenteritis, vomiting or diarrhea. |
| INHALATION: | Silver nitrate is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation of mists may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, laryngitis, dyspnea, headache, nausea and vomiting. |
| CARCINOGENICITY: | No information available. |
| TERATOGENICITY: | No information available. |
| REPRODUCTIVE TOXICITY: | No information available. |
| MUTAGENICITY: | No information available. |
| CHRONIC TOXICITY: | No information available. |
| TARGET ORGAN EFFECTS: | No information available. |

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Silver nitrate is very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| COMPONENT | LC50 (leuciscus idus) | LC50 (daphnia) | EC50 (photobacterium phosphoreum) |
|------------------|--------------------------|-------------------|--------------------------------------|
| Silver Nitrate | 0.029 mg/L/96hr | 0.0006 mg/L/48hr | 0.038 mg/L/24 hr |
| Propylene glycol | Not available | Not available | Not available |

PERSISTENCE AND DEGRADABILITY: Not applicable to inorganic substances.

BIOACCUMULATIVE POTENTIAL: No information available.

MOBILITY IN SOIL: No information available.

OTHER ADVERSE EFFECTS: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Empty containers, which have not been cleaned and purged, contain residual hazardous material and must be recycled, or disposed of, in accordance with local regulations.

SECTION 14: TRANSPORTATION INFORMATION

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| TDG | Not regulated |
| DOT | Not regulated |
| IATA | Not regulated |
| IMDG | Not regulated |
| UN NUMBER: | Not applicable |
| PROPER SHIPPING NAME: | Not applicable |
| CLASS: | Not applicable |
| PACKING GROUP: | Not applicable |
| IMDG HAZARDS: | Not applicable |
| BULK TRANSPORT: | Not applicable |
| SPECIAL PRECAUTIONS: | Not applicable |

SECTION 15: REGULATORY INFORMATION

DSL: Ingredients are either on, or exempt from, the DSL.

WHMIS CLASS: Not controlled

TSCA: Ingredients are either on, or exempt from the list.

SECTION 16: OTHER INFORMATION

REVISION DATE: February 4, 2019

PREVIOUS VERSION DATE: Not applicable

The information contained herein is given in good faith, but no warranty, expressed or implied, is made.