

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Silver Nitrate Solution (5%)

SYNONYMS: None

PRODUCT CODES: ES37152, ES37154, Component of Stain Kits ES4803, ES4827

MANUFACTURER: Azer Scientific, Inc.

ADDRESS: 701 Hemlock Rd, Morgantown, PA 19543

CHEMTREC PHONE: 800-424-9300

SUPPORT: 610-524-5810

FAX: 610-901-3046

PRODUCT USE: Laboratory Reagent

PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Skin Irritation Category 2; Eye Irritation Category 2A; Acute Aquatic Toxicity Category 2; Chronic Aquatic Toxicity Category 2



Signal Word: Warning!

| Hazard Phrases | |
|----------------|--|
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |

| Precautionary Phrases | |
|-----------------------|--|
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. |
| P337+P315 | If eye irritation persists: Get medical advice/attention. |
| P273 | Avoid release to the environment. |

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Mixture

***May contain additional non-hazardous proprietary ingredients.**

****May contain additional active ingredients at concentrations <1% w/v**

| <u>INGREDIENT:</u> | <u>CAS NO.</u> | <u>% WT</u> |
|--------------------|----------------|-------------|
| Silver Nitrate | 7761-88-8 | ≤5 |

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.

SKIN: In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical if irritation develops.

INGESTION: Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms worsen.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT:

FLASH POINT: Not Available

AUTOIGNITION TEMPERATURE: Not Available

NFPA HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 0 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH:1 FLAMMABILITY: 0 REACTIVITY: 0
PROTECTION: B

EXTINGUISHING MEDIA: Use dry chemical, CO₂, water spray (fog) or foam.

NOT SUITABLE: Do not use water jet.

SPECIAL FIRE FIGHTING PROCEDURES: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

HAZARDOUS DECOMPOSITION PRODUCTS: Not available for mixture

SECTION 5 NOTES: Development of hazardous combustion gases or vapors possible in the event of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Do not allow product to enter drains.

Large spill and leak: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

SECTION 6 NOTES: Avoid releasing large quantities into the environment.

SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid contact with eyes. Wash thoroughly after handling. Avoid breathing vapor.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area. Store in a well-ventilated area. Store at 2-8°C

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Working areas should be adequately large and well ventilated to prevent concentration of vapors. Provide mechanical exhaust ventilation or other engineering controls to keep airborne concentration of vapors below their respective threshold limits.

RESPIRATORY PROTECTION: Avoid breathing vapor. No special PPE required if ventilation adequate.

EYE PROTECTION: Safety glasses or goggles are required.

SKIN PROTECTION: Chemical resistant gloves are required. Glove material must be resistant to the components of this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing is required, lab coat or apron.

WORK HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES: The product does not contain any relevant quantities of materials with critical values that require monitoring at the workplace.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Transparent, colorless

ODOR: Odorless

PHYSICAL STATE: liquid

pH AS SUPPLIED: Not available

BOILING POINT: Not available

MELTING POINT: Not available

FREEZING POINT: Not available

VAPOR PRESSURE (mmHg): Not available

VAPOR DENSITY (AIR = 1): Not available

EVAPORATION RATE: Not available

SOLUBILITY IN WATER: Soluble in water

MOLECULAR WEIGHT: Mixture

VISCOSITY: Not established

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable under normal conditions of use.

CONDITIONS TO AVOID (STABILITY): Excessive heat, direct sunlight

INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizers, alkalis, antimony salts, arsenates, carbonates, and phosphates.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon dioxide, carbon monoxide, Oxides of silver

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Numerical Measures: No data available

Carcinogenicity: No components are classified as human carcinogen.

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects:

Inhalation May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTES OF ENTRY: Skin/eye contact and ingestion.

TARGET ORGANS: Not available

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

Fish: No relevant studies identified.

Crustacea: No relevant studies identified.

Algae/Aquatic Plants: No relevant studies identified.

Other Organisms: No relevant studies identified.

PERSISTENCE AND DEGRADABILITY: Biodegradation is expected

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely.

MOBILITY IN SOIL: No data available

PBT and vPvB ASSESSMENT: Not required.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Unused product: dispose as a regulated hazardous waste. Spent product or spill clean up-follow all provincial, local, state, and federal regulations.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:

| | |
|-----------------------------|--|
| UN No. | UN3082 |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver Nitrate) |
| Hazard Class | 9 |
| Packing Group | III |

TDG

| | |
|-----------------------------|--|
| UN No. | UN3082 |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver Nitrate) |
| Hazard Class | 9 |
| Packing Group | III |

IATA

UN No. UN3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver Nitrate)
Hazard Class 9
Packing Group III

IMDG/IMP

UN No. UN3082
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver Nitrate)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Aquatic toxicity

U.S. Federal regulations:

TSCA 8(a) IUR: Partial exemption

United States inventory (TSCA 8b): Listed on inventory.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 Form R - Reporting:

DEA List I & II Chemicals

(Precursor Chemicals): Not Listed

RTK STATES: Silver Nitrate CAS# 7761-88-8 PA

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: None

CANADA

WHMIS (Canada): Class D2: Material causing other toxic effects.

Canadian lists:

CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the components are listed.

CEPA DSL / CEPA NDSL:

All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16: OTHER INFORMATION

National Fire Protection Association (U.S.A.)



DISCLAIMER: This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Azer Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.

PREPARATION INFORMATION: Prepared 07/14/2015 REV1

Reviewed 10/02/2017