

**Safety Data Sheet (SDS)**

Version 2

Reviewed on 1.1.2024

**1. Chemical and Company Identification**

Product Name: Silver Enhancement Kit - Microscopy

Product Use: Laboratory chemical

Manufacturer/Supplier: Cytodiagnostics Inc., 5867 South Garnett Road, Tulsa, Oklahoma 74146 USA

Phone: (866) 344-3954

Web: [www.cytodiagnostics-us.com](http://www.cytodiagnostics-us.com)Information and Support: [customer\\_service-us@cytodiagnosics.com](mailto:customer_service-us@cytodiagnosics.com)**2. Hazards Identification****Classification of the substance or mixture:****GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)**

Acute toxicity, Oral (Category 4), H302

Eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 2), H351

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

**GHS Label Elements and Precautionary Statements:****Signal Word:** Danger**Hazard Statement(s)**

|      |   |
|------|---|
| H302 | Harmful if swallowed.                                 |
| H317 | May cause an allergic skin reaction                   |
| H319 | Causes serious eye irritation.                        |
| H341 | Suspected of causing genetic defects.                 |
| H351 | Suspected of causing cancer                           |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Precautionary Statements**

|                     |   |
|---------------------|---|
| P264                | Wash skin thoroughly after handling.  |
| P270                | Do not eat, drink or smoke when using his product.  |
| P273                | Avoid release to the environment.   |
| P280                | Wear protective gloves/ protective clothing/ eye protection/ face protection.   |
| P301 + P312 + P 330 | IF SWALLOWED: Call Poison Center/Doctor of you feel unwell. Rinse mouth.  |
| P305 + P351 + P338  | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present an easy to do. Continue rinsing. |
| P337 + P313         | If eye irritation persists: Get medical advice/ attention.  |
| P333 + P313         | If skin irritation of rash occurs: Get medical advice/ attention.   |
| P362 + P364         | Take off contaminated clothing and wash it before reuse.  |
| P501                | Dispose of contents/ container to an approved waste disposal plant.   |

**Hazards not otherwise classified:**

None

**3. Composition/Information on Ingredients**

**Safety Data Sheet (SDS)**

Version 2

Reviewed on 1.1.2024

**This product contains:** 25mL of Solution A and 25mL of Solution B**Mixture: Solution A****Component 1:** Silver Nitrate,  $\geq 0.5\%$  -  $< 1.5\%$  (w/v) CAS# 7761-88-8**Component 2:** Proprietary Component– Trade Secret per 29 CFR 1910.1200 i 1**Mixture: Solution B****Component 1:** Hydroquinone, 0.6% (w/v), CAS#123-31-9**4. First Aid Measures****In case of skin contact:** In case of contact with skin, immediately remove contaminated clothing and wash extensively with soap and water and seek medical advice if symptoms occur.**In case of ingestion:** If swallowed and person is conscious wash mouth with water, seek medical advice immediately.**In case of eye contact:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses**If case of inhalation:** In case of accident by inhalation, remove to fresh air. If not breathing, give artificial respiration.**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

**Immediate medical attention and special treatment needed:**

No data available

**5. Fire Fighting Measures****Suitable extinguishing media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards arising from the substance or mixture:**

Sodium oxides, Hydrogen chloride gas, Nitrogen oxides, Carbon oxides

**Special protective equipment and precautions for fire-fighters:**

Wear self-contained breathing apparatus if necessary.

**6. Accidental Release Measures****Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Avoid contact with skin and eyes. Avoid aerosols or dust formation. Avoid breathing vapours, mist or gas.

**Methods and materials for containment and cleaning up:**

Keep in a suitable closed container for disposal.

Do not allow product to enter drains. For disposal see section 13.

**7. Handling and Storage****Precautions for safe handling:**

Immediately change contaminated clothing. Wash hands after working with substance.

Provide adequate exhaust ventilation at places where dust and aerosols may form.

**Conditions for safe storage:**

Keep container tightly closed in a dry and well-ventilated place. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2-8°C

**8. Exposure Controls/Personal Protection****Appropriate engineering controls:** Standard industrial hygiene practice.**Body protection:** The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Safety Data Sheet (SDS)**

Version 2

Reviewed on 1.1.2024

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection:** Respiratory protection not required. In case of insufficient ventilation or for nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respiratory cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**9. Physical and Chemical Properties**

|                                     | <b>Solution A</b>  | <b>Solution B</b>  |
|-------------------------------------|--------------------|--------------------|
| Appearance                          | Clear solution     | Clear solution     |
| Odour                               | Odourless          | Odourless          |
| Odour threshold                     | no data available  | no data available  |
| pH                                  | 8                  | 3-4                |
| Melting Point/Freezing point        | no data available  | no data available  |
| Initial boiling point/boiling range | no data available  | no data available  |
| Flash point                         | no data available  | no data available  |
| Evaporation rate                    | no data available  | no data available  |
| Flammability (solid; gas)           | no data available  | no data available  |
| Lower flammable/explosive limit     | no data available  | no data available  |
| Upper flammable/explosive limit     | no data available  | no data available  |
| Vapour pressure                     | no data available  | no data available  |
| Vapour density                      | no data available  | no data available  |
| Relative density                    | no data available  | no data available  |
| Solubility                          | Dilutable in water | Dilutable in water |
| Partition coefficient               | no data available  | no data available  |
| Auto-ignition temperature           | no data available  | no data available  |
| Decomposition temperature           | no data available  | no data available  |
| Viscosity                           | no data available  | no data available  |

**10. Stability and Reactivity**

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** No data available

**Materials to avoid:** Oxidizing agents, strong acids and bases

**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions. – Oxides of phosphorus, Sodium oxides, Hydrogen chloride gas, Potassium oxides, carbon oxides

Other decomposition products – no data available

In the event of fire: see section 5

**11. Toxicological Information**
**Acute Toxicity**

**Oral LD50: Oral** Rat - female – 367.3 mg/kg (Hydroquinone CAS# 123- 31-9)

**Inhalation LD50:** No data available

**Dermal LD50:** Rabbit – male and female - >2000 mg/kg (Hydroquinone CAS# 123- 31-9)

**Other information on acute toxicity:** No data available

Version 2

**Safety Data Sheet (SDS)**

Reviewed on 1.1.2024

**Skin:** No data available - May be harmful in contact with skin.  
**Ingestion:** No data available - May be harmful if ingested.  
**Eyes:** No data available - May be harmful in contact with eyes.  
**Inhalation:** No data available - May be harmful if inhaled.  
**Germ Cell Mutagenicity:** Suspected of causing genetic defects  
**Carcinogenicity:** Suspected of causing cancer  
**Reproductive toxicity:** No data available  
**Specific target organ toxicity – single exposure:** No data available  
**Specific target organ toxicity – repeated exposure:** No data available  
**Aspiration hazard:** No data available

**12. Ecological Information**

No data available

**13. Disposal Considerations**

**Disposal:** Consult a licensed waste disposal specialist for proper destruction. Observe all local, state and federal regulations.

**14. Transport Information**

**Hazard class:** Not regulated for transportation.

**Product identification number:** Not determined

**15. Regulatory Information**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the safety data sheet contains all of the information required by those regulations.

**16. Other Information**

This product is for laboratory research purposes, not for diagnostic or therapeutic use in humans or animals.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Users should make independent decisions regarding completeness of the information based on all sources available. Cytodiagnostics Inc. shall not be held liable for any damage resulting from handling or contact with the above product.

Revision Date: 1.1.2024