

# Safety Data Sheet

Issue Date: 16-Apr-2015

Revision Date: 01-Oct-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Silver Paste

### Other means of identification

**UN/ID No** UN3082

### Recommended use of the chemical and restrictions on use

**Recommended Use** Laboratory chemicals and manufacture of substances.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Nexceris, LLC  
404 Enterprise Drive  
Lewis Center, OH 43035  
www.nexceris.com

### Emergency Telephone Number

**Company Phone Number** Non-emergency calls/questions: 1-614-842-6606

Fax: 1-614-842-6607

**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Silver liquid

**Physical State** Liquid

### Classification

Serious eye damage/eye irritation

Category 2

### Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

### Signal Word

Warning

### Hazard Statements

Causes serious eye irritation



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection

**Precautionary Statements - Response**

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

**Other Hazards**

Very toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                | CAS No    | Weight-% |
|------------------------------|-----------|----------|
| Silver                       | 7440-22-4 | 70       |
| Diethyl Glycol Ether Acetate | 112-15-2  | 30       |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

|                       |  |
|-----------------------|--|
| <b>General Advice</b> | Provide this SDS to medical personnel for treatment.   |
| <b>Eye Contact</b>    | 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. |
| <b>Skin Contact</b>   | Wash off immediately with plenty of water for at least 15 minutes.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Ingestion</b>      | Clean mouth with water and drink afterwards plenty of water.   |

**Most important symptoms and effects**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Causes serious eye irritation. May be harmful if swallowed. |
|-----------------|---|

**Indication of any immediate medical attention and special treatment needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to Physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Hazardous Combustion Products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Silver/silver oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

|                                  |  |
|----------------------------------|--|
| <b>Personal Precautions</b>      | Use personal protective equipment as required.   |
| <b>Environmental Precautions</b> | Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information. |

### Methods and material for containment and cleaning up

|                                |  |
|--------------------------------|--|
| <b>Methods for Containment</b> | Prevent further leakage or spillage if safe to do so.  |
| <b>Methods for Clean-Up</b>    | Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). |

## 7. HANDLING AND STORAGE

### Precautions for safe handling

|                                |  |
|--------------------------------|--|
| <b>Advice on Safe Handling</b> | Handle in accordance with good industrial hygiene and safety practice. Wear eye/face protection. Wash face, hands, and any exposed skin thoroughly after handling. |
|--------------------------------|--|

### Conditions for safe storage, including any incompatibilities

|                               |  |
|-------------------------------|--|
| <b>Storage Conditions</b>     | Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid contact with air/oxygen. Check container pressure periodically to prevent explosive peroxides. |
| <b>Incompatible Materials</b> | Oxidizing agents.  |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name       | ACGIH TLV                                | OSHA PEL   | NIOSH IDLH  |
|---------------------|--|--|---|
| Silver<br>7440-22-4 | TWA: 0.1 mg/m <sup>3</sup> dust and fume | TWA: 0.01 mg/m <sup>3</sup><br>(vacated) TWA: 0.01 mg/m <sup>3</sup> | IDLH: 10 mg/m <sup>3</sup> dust<br>TWA: 0.01 mg/m <sup>3</sup> dust |

### Appropriate engineering controls

|                             |   |
|-----------------------------|---|
| <b>Engineering Controls</b> | Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems. |
|-----------------------------|---|

### Individual protection measures, such as personal protective equipment

|                                       |   |
|---------------------------------------|---|
| <b>Eye/Face Protection</b>            | Safety glasses.   |
| <b>Skin and Body Protection</b>       | Impervious gloves and protective clothing are recommended.                |
| <b>Respiratory Protection</b>         | In case of insufficient ventilation, wear suitable respiratory equipment. |
| <b>General Hygiene Considerations</b> | Handle in accordance with good industrial hygiene and safety practice.    |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                       |               |                       |                |
|-----------------------|---------------|-----------------------|----------------|
| <b>Physical State</b> | Liquid        | <b>Odor</b>           | Not determined |
| <b>Appearance</b>     | Silver liquid | <b>Odor Threshold</b> | Not determined |
| <b>Color</b>          | Silver        |                       |                |

| <u>Property</u>              | <u>Values</u>                | <u>Remarks • Method</u> |
|------------------------------|------------------------------|-------------------------|
| pH                           | Not determined               |                         |
| Melting Point/Freezing Point | Not determined               |                         |
| Boiling Point/Boiling Range  | Not determined               |                         |
| Flash Point                  | Not determined               |                         |
| Evaporation Rate             | Not determined               |                         |
| Flammability (Solid, Gas)    | Not determined               |                         |
| Upper Flammability Limits    | Not determined               |                         |
| Lower Flammability Limit     | Not determined               |                         |
| Vapor Pressure               | Not determined               |                         |
| Vapor Density                | Not determined               |                         |
| Specific Gravity             | Not determined               |                         |
| Water Solubility             | Not miscible                 | Difficult to mix        |
| Solubility in other solvents | Not determined               |                         |
| Partition Coefficient        | Not determined               |                         |
| Auto-ignition Temperature    | Product is not self igniting |                         |
| Decomposition Temperature    | Not determined               |                         |
| Kinematic Viscosity          | Not determined               |                         |
| Dynamic Viscosity            | Not determined               |                         |
| Explosive Properties         | Not determined               |                         |
| Oxidizing Properties         | Not determined               |                         |

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

May form explosive peroxides. Reacts with strong oxidizers.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Oxidizing agents.

### Hazardous Decomposition Products

Decomposition will not occur if handled and stored properly. Carbon oxides. Silver oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Avoid contact with skin.

**Inhalation** Avoid breathing vapors or mists.

**Ingestion** May be harmful if swallowed.

### Component Information

| Chemical Name                            | Oral LD50            | Dermal LD50              | Inhalation LC50 |
|--|----------------------|--------------------------|-----------------|
| Silver<br>7440-22-4                      | > 2000 mg/kg ( Rat ) | -                        | -               |
| Diethyl Glycol Ether Acetate<br>112-15-2 | = 11 g/kg ( Rat )    | = 15100 µL/kg ( Rabbit ) | -               |

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

### Numerical measures of toxicity

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life with long lasting effects.

### Component Information

| Chemical Name       | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea                                       |
|---------------------|----------------------|---|----------------------------|---|
| Silver<br>7440-22-4 |                      | 0.00155 - 0.00293: 96 h<br>Pimephales promelas mg/L<br>LC50 static 0.0062: 96 h<br>Oncorhynchus mykiss mg/L<br>LC50 flow-through 0.064: 96<br>h Lepomis macrochirus mg/L<br>LC50 static |                            | 0.00024: 48 h Daphnia<br>magna mg/L EC50 Static |

### Persistence/Degradability

Not determined.

### Bioaccumulation

Not determined.

### Mobility

Not determined

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**US EPA Waste Number**

| Chemical Name       | RCRA | RCRA - Basis for Listing          | RCRA - D Series Wastes    | RCRA - U Series Wastes |
|---------------------|------|-----------------------------------|---------------------------|------------------------|
| Silver<br>7440-22-4 |      | Included in waste stream:<br>F039 | 5.0 mg/L regulatory level |                        |

**California Hazardous Waste Status**

| Chemical Name       | California Hazardous Waste Status |
|---------------------|-----------------------------------|
| Silver<br>7440-22-4 | Toxic                             |

**14. TRANSPORT INFORMATION**

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

**UN/ID No** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s. (Silver)  
**Hazard Class** 9  
**Packing Group** III

**IATA**

**UN/ID No** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s. (Silver)  
**Hazard Class** 9  
**Packing Group** III

**IMDG**

**UN/ID No** UN3082  
**Proper Shipping Name** Environmentally hazardous substance, liquid, n.o.s. (Silver), marine pollutant  
**Hazard Class** 9  
**Packing Group** III

**15. REGULATORY INFORMATION**

**International Inventories**

| Chemical Name                | TSCA    | DSL | NDSL | EINECS  | ELINCS | ENCS    | IECSC | KECL    | PICCS | AICS |
|------------------------------|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Silver                       | Present | X   |      | Present |        |         | X     | Present | X     | X    |
| Diethyl Glycol Ether Acetate | Present | X   |      | Present |        | Present | X     | Present | X     | X    |

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name       | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                 |
|---------------------|--------------------------|----------------|--|
| Silver<br>7440-22-4 | 1 lb                     |                | RQ 1 lb final RQ<br>RQ 0.454 kg final RQ |

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                           | CAS No    | Weight-% | SARA 313 - Threshold Values % |
|---|-----------|----------|-------------------------------|
| Silver - 7440-22-4                      | 7440-22-4 | 70       | 1.0                           |
| Diethyl Glycol Ether Acetate - 112-15-2 | 112-15-2  | 30       | 1.0                           |

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Silver        |                             | X                      | X                         |                            |

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Chemical Name                            | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| Silver<br>7440-22-4                      | X          | X             | X            |
| Diethyl Glycol Ether Acetate<br>112-15-2 | X          |               | X            |

**16. OTHER INFORMATION**

|                    |   |                                       |                                      |  |
|--------------------|---|---------------------------------------|--------------------------------------|--|
| <b><u>NFPA</u></b> | <b>Health Hazards</b><br>Not determined | <b>Flammability</b><br>Not determined | <b>Instability</b><br>Not determined | <b>Special Hazards</b><br>Not determined     |
| <b><u>HMIS</u></b> | <b>Health Hazards</b><br>1              | <b>Flammability</b><br>1              | <b>Physical Hazards</b><br>1         | <b>Personal Protection</b><br>Not determined |

**Issue Date:** 16-Apr-2015  
**Revision Date:** 01-Oct-2015  
**Revision Note:** Company name change

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**