



SS1109  
SDS Version 3.0

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## SAFETY DATA SHEET

### Section 1: Identification of the substance / mixture and of the company / undertaking

**Product Identifier:** SS1109

**Other Means of Identification:** Stretchable Silver Conductor

**Recommended use of the chemical and restrictions on use:** None identified

**Supplier:**

ACI Materials, Inc.  
44 Castilian Drive  
Goleta, CA 93117  
1 (805) 324-4486

**Emergency Phone Number:**

For emergency health, safety and environmental information, call 1 (805) 570-1071.

### Section 2: Hazards Identification

**Classification of the substance or mixture:**

Not a hazardous substance or mixture.



**Symbols:**

**Signal word:** None.

**Hazard Statements:**

H401 Toxic to aquatic life.

**Precautionary Statements:**

P273 Avoid release to the environment

**Describe any hazards not otherwise classified:** None known.

**Section 3: Composition / Information on ingredients**

Chemical Name	CAS Number	Concentration, %
Silver	7440-22-4	50 – 70

Remaining components are non-hazardous or present in amounts below reportable limits. Exact percentage values for components are proprietary in accordance with 29 CFR 1910.1200(i).

**Section 4: First-aid measures**

**Description of First aid measures**

**General:** If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician / get medical attention.

**Inhalation:** Move person to fresh air. If required, provide artificial respiration, consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Rinse immediately with plenty of water also under the eyelids, for at least 15 minutes. Get medical attention if symptoms persist.

**Ingestion:** Never give anything by mouth to an unconscious person. Clean mouth with water. Get medical attention if symptoms persist.

**Most important symptoms/effects, acute and delayed:** The most important known symptoms and effects are described in the labelling (see Section 2.2) and / or in section 11.

**Indication of immediate medical attention and special treatment needed:** No further information available.

**Section 5: Fire-fighting measures**

**Suitable extinguishing media:** Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Alcohol resistant foam; water spray.

**Unsuitable extinguishing media:** Do not use sharp water jet; may spread fire.

**Specific hazards arising from the mixture:** Carbon oxides.

**Specific protective equipment and precautions for fire-fighters:** Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

**Section 6: Accidental release measures**

**Personal precautions, protective equipment, and emergency procedures:** Wear suitable protective clothing, gloves and eye / face protection. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors.

**Methods and materials for containment and cleaning up:** Approach suspected leak areas with caution. Eliminate ignition sources. Soak up with inert absorbent material and dispose of as hazardous waste. Place in appropriate chemical waste container.

**Section 7: Handling and storage**

**Precautions for safe handling:** Avoid contact with skin, clothing and eyes. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Wash skin thoroughly after handling this product. Provide eyewash fountains and safety showers in the work area.

**Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Store this material away from incompatible substances (see section 10).

**Section 8: Exposure controls/personal protection**

**Control Parameters:** Exposure limits are listed below, when known.

**Components with workplace control parameters:**

Material	CAS No.	Value	Control Parameter	Basis
Silver (metallic)	7440-22-4	TWA	0.1 mg/m <sup>3</sup>	ACGIH Threshold Limit Values (TLV)
		TWA	0.01 mg/m <sup>3</sup>	OSHA Permissible Exposure Limit (PEL)

**Appropriate engineering controls:** None under normal use conditions. Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment:**

**General Information:** Ensure eye wash station and safety shower are readily available.

**Individual protection measures:**

**Eye/face protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator should be worn.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

<b>Section 9: Physical and chemical properties</b>
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**Appearance:** Silver paste.

**Odor:** Mild.

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** No data available.

**Flash point:** 96°C (205°F) (Lowest flash point value of any component.)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Relative density:** No data available

**Solubility:** No data available

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Other Information:** Amounts listed are typical and do not represent a specification.

<b>Section 10: Stability and reactivity</b>
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**Reactivity:** None known, based on information available.

**Chemical stability:** Stable under normal conditions. Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 6 months.

**Possibility of hazardous reactions:** Forms peroxides of unknown stability.

**Conditions to avoid:** Incompatible products.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon oxides.

<b>Section 11: Toxicological information</b>
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**Information on the likely routes of exposure:** Product test data is not available. Toxicological information appears in this section when the constituent data is available.

**Numerical measures of toxicity:**

Component	LD50 Oral – Rat	LD50 Dermal – Rabbit	LC50 Inhalation
Silver	5,000 mg/kg	No data available	No data available

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

**Skin / Irritation:** No data available.

**Serious eye damage / eye irritation**

Silver (metallic): Causes eye irritation (Category 2B)

**Respiratory or Skin Sensitization**

Silver (metallic): Causes allergic contact dermatitis by exposure of a granular material.

**Specific target organ systemic toxicity – single exposure**

Silver (metallic): Cause damage to organs (respiratory organs) (category 1).

**Specific target organ systemic toxicity single exposure**

Silver (metallic): Cause damage to organs (eye, respiratory organs: Inhalation) (category 1).

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Symptoms / effects, both acute and delayed:** None known.

#### **Section 12: Ecological Information**

**Ecotoxicity (aquatic and terrestrial, where available):** Ecotoxicological information appears in this section when such data is available for the components of the mixture.

**Toxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation / Accumulation:** No information available.

**Mobility:** Is not likely mobile in the environment due its low water solubility.

**Silver:** Silver is very toxic for aquatic organisms.

#### **Section 13: Disposal Considerations**

Dispose of container and unused contents in accordance with federal, state and local requirements.

#### **Section 14: Transport Information**

- (a) **UN Number** UN3077
- (b) **UN proper shipping name** Environmentally Hazardous Substance, Solid, N.O.S. (Contains Silver)
- (c) **Transport hazard class** 9
- (d) **Packing group** III

#### **Section 15: Regulatory Information**

**Safety, health and environmental regulations / legislation specific for the product:**

**U.S. Federal and State regulations / legislation:**

This SDS has been prepared in accordance with the hazard criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**U.S. Superfund Amendments and Reauthorization Act (SARA) – SARA Section 313.**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and 40 CFR 372:

Silver.

**SARA 311/312 Hazard Categories:**

This product does not contain toxic chemicals subject to the reporting requirements of Sections 311/312 of the Emergency Planning and Community Right-to-Know act of 1986 and 40 CFR 372

**U.S. TSCA Inventory (TSCA):**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**California Proposition 65:**

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

<b>Section 16: Other Information</b>
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**Revision Date:** June 6, 2023.

**Nomenclature:**

ACGIH = American Conference of Governmental Industrial Hygienists

BCF = Bioconcentration Factor

C = Ceiling Value

EC50 = Effective Concentration

LC = Lethal concentration

LD = Lethal dose

ND = No Data

NIOSH = The National Institute for Occupational Safety and Health

NOEC = No Observed Effect Concentration

Pow = Partition Coefficient

REL = Recommended Exposure Limit

STEL = Short Term Exposure Limit

TWA = Time weighted average

### **Other Information**

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### **Disclaimer Notice**

This product is a complex mixture of liquids and solids. This SDS was prepared based upon the SDS of the raw materials used in the mixture.

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