

# **MATERIAL SAFETY DATA SHEET**

## **SREEINIVASA INDUSTRIES**

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**PRODUCT NAME : SILVER ANODE**

### **1. Product Identification**

**Product Name:** Silver

**CAS Number:** 7440-22-4

### **2. Composition**

Silver (7440-22-4) 99 - 100

No Data Available...

### **3. Hazards Identification**

**Primary Routes(s) Of Entry**

Ingestion; inhalation.

#### **Eye Hazards**

Eye contact with this product in finely-divided forms may cause irritation and/or argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and respiratory tract.

#### **Skin Hazards**

Skin contact with this product in finely-divided forms may cause irritation and/or argyria.

#### **Ingestion Hazards**

Ingestion of finely-divided forms of the product may cause gastrointestinal irritation, abdominal pain, and/or vomiting.

### **Inhalation Hazards**

Inhalation of silver does not present a significant risk to health when used according to instructions and with appropriate protective measures (see Section #8). Chronic exposure to silver via inhalation has been reported to cause argyria.

## **4. First Aid Measures**

### **Eye**

Flush affected areas with water for at least fifteen minutes. Seek medical assistance if necessary.

### **Skin**

Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical attention if necessary. Launder or dry-clean clothing before reuse.

### **Ingestion**

If subject is conscious, induce vomiting. If unconscious or convulsive, seek immediate medical assistance.

### **Inhalation**

If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.

### **Note To Physician**

Silver metal is not acutely toxic if ingested nor by inhalation, nor is it absorbed through the skin. Long-term chronic exposure may cause argyria.

## **5. Fire Fighting Measures**

Flash Point: N/Apl. °F N/Apl. °C

Autoignition Point: N/Apl. °F N/Apl. °C

Flammability Class: N/Apl.

Lower Explosive Limit: N/Apl.

Upper Explosive Limit: N/Apl.

## **Fire And Explosion Hazards**

In finely-divided form, this product may ignite when exposed to flame or by reaction with incompatible materials (see Section #10). If present in a fire or explosion, it may emit fumes of the constituent metals or metal oxides.

## **Extinguishing Media**

Use dry chemical. Do not use water.

## **Fire Fighting Instructions**

If fighting a fire in which this product is present, wear a self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

## **6. Accidental Release Measures**

If a finely-divided form of product is spilled, clean up spillage so as to minimize dispersion of dust. Wet sweeping or vacuuming using HEPA filtration are recommended.

## **7. Handling And Storage**

### **Handling Precautions**

No special handling precautions are required.

### **Storage Precautions**

Do not store in proximity to incompatible materials (see Section #10).

### **Work/Hygienic Practices**

To minimize ingestion, wash hands and face before eating, drinking, applying cosmetics, or using tobacco.

## **8. Exposure Controls/Personal Protection**

### **Engineering Controls**

Use appropriate ventilation (e.g., dilution, local exhaust) adequate to maintain concentrations of all components to within their applicable standards.

### **Eye/Face Protection**

Wear eye protection adequate to prevent eye contact with finely-divided product and eye injury if the product is used with a flame. Plastic-frame spectacles with side shields and filter lenses (shade #3 or #4) are recommended.

### **Skin Protection**

Wear appropriate protective gloves and clothing to prevent skin injury if this product is used with a flame. Avoid flammable fabrics.

### **Respiratory Protection**

If an exposure level exceeds an applicable exposure standard, use a NIOSH-approved respirator having a configuration (type of facepiece, filter media, assigned protection factor, etc.) appropriate to the concentration of the contaminant(s) generated. For guidance on selection and use of respiratory protection, consult American National Standard Z88.2 USA).

## **9. Physical And Chemical Properties**

### **Appearance**

Odorless, lustrous white metal in form of wire, rod, tubing, sheet, strip, grain, powder, or anodes.

Chemical Type: Mixture

Physical State: Solid

Melting Point: 1764 °F 962 °C

Boiling Point: 4014 °F 2212 °C

Specific Gravity: 10.50

Molecular Weight: 107.90

Solubility: Insoluble

Other commonly-reported physical properties (odor threshold, evaporation rate, vapor pressure, vapor density, oil-water partition coefficient, percent volatiles, percent VOCs, pH, viscosity) are not applicable to this product.

## **10. Stability And Reactivity**

Stability: stable

Hazardous Polymerization: will not occur

### **Conditions To Avoid (Stability)**

Silver can form an unstable acetylide if in contact with acetylene gas.

### **Incompatible Materials**

Strong oxidizers, ammonia; nitric acid; ethylene imine; chlorine trifluoride; sulfuric acid; inorganic and organic peroxides; peroxyformic acid; bromoazide; oxalic acid; tartaric acid; 1-bromo-2-propyne; permonosulfuric acid.

### **Hazardous Decomposition Products**

Heating to elevated temperatures may liberate metal/metal oxide fumes.

## **11. Toxicological Information**

### **Chronic/Carcinogenicity**

Silver is not classified as a potential or demonstrated human carcinogen by IARC, NTP, or OSHA.

### **Conditions Aggravated By Overexposure**

Pre-existing pulmonary diseases (e.g., bronchitis, asthma) may be aggravated by inhalation exposure, particularly as fume. Pre-existing skin diseases may be aggravated by dermal exposure to finely-divided forms of the product.

## **12. Ecological Information**

In its intended manner of use, this product should not be released into the environment, and adverse effects on ecosystems are not anticipated under recommended conditions of use, storage, and disposal.

## **13. Disposal Considerations**

Dispose of unused or unusable product in accordance with applicable Federal, State/Provincial, and local regulations.

## **14. Transport Information**

This product is not a Hazardous Substance or Dangerous Goods per USDOT, TDG (Canada), IATA, or IMO regulations.