

US TOLL FREE - 1.833.332.1010

INTERNATIONAL +1.830.253.5621

**Silver (CAS NO 7440-22-4) &
Silver Chloride (CAS NO 7783-90-6)**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

SECTION 1: Identification

Product: Silver Wire Coated with Silver Chloride

Product Code:

Silver: CAS NO 7440-22-4

Silver Chloride: 7783-90-6

Recommended Use: Laboratory and industrial & for professional use only

Restrictions on Use: Not for direct consumption or use in food, drugs, or cosmetics

Supplier Details:

Name: Tinker & Rasor

Address: 2828 FM 788, New Braunfels TX, 78130, United States

Phone: +1 (830) 253-5621

Emergency Contact: +1 (830) 253-5621

SECTION 2: Hazard(s) Identification

- **GHS Classification:**
 - Acute Toxicity (Oral): Category 4
 - Skin Corrosion/Irritation: Category 2
 - Eye Damage/Irritation: Category 2A
 - Specific Target Organ Toxicity (Repeated Exposure): Category 2
- **Label Elements:**
 - **Pictograms:**





US TOLL FREE - 1.833.332.1010

INTERNATIONAL +1.830.253.5621

- **Signal Word:** Warning
- **Hazard Statements:**
 - H302: Harmful if swallowed
 - H315: Causes skin irritation
 - H319: Causes serious eye irritation
 - H373: May cause damage to organs through prolonged or repeated exposure
 - 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 this product
 - P273 Avoid release to the environment.
 - P280: Wear protective gloves, eye protection, and face protection
 - P301+P312: If swallowed, call a poison center or doctor if you feel unwell
 - P305+P351+P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 - P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: Composition/Information on Ingredients

- **Substance:**
 - **Product:** Silver coated with Silver Chloride
 - **CAS Number:** 7440-22-4 (Silver), 7783-90-6 (Silver Chloride)
 - **Weight Percent:** Silver: ~90%; Silver Chloride: ~10%
 - **Hazardous ingredients according to Regulation (EC) No 1272/2008**
 - Component Classification Concentration: **Silver chloride**

US TOLL FREE - 1.833.332.1010

INTERNATIONAL +1.830.253.5621

- CAS-No. 7783-90-6 Aquatic Acute 1; Aquatic <= 100 %
- EC-No. 232-033-3 Chronic 1; H410
- **Hazardous ingredients according to Directive 1999/45/EC**
 - Component Classification Concentration: **Silver chloride**
 - CAS-No. 7783-90-6 N, R50/53 <= 100 %

SECTION 4: First Aid Measures

- **General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- **Eye Contact:** Rinse with water for at least 15 minutes. Seek medical attention if irritation persists.
- **Skin Contact:** Wash with soap and water. Remove contaminated clothing. Seek medical advice if symptoms develop.
- **Inhalation:** Move to fresh air. If symptoms persist, seek medical attention.
- **Ingestion:** Do not induce vomiting. Rinse mouth. Seek immediate medical attention.

SECTION 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- **Special Hazards:** Thermal decomposition may produce toxic fumes including hydrogen chloride gas and Silver/silver oxides.
- **Protective Equipment for Firefighters:** Use self-contained breathing apparatus and full protective gear.



US TOLL FREE - 1.833.332.1010
INTERNATIONAL +1.830.253.5621

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Use protective gloves and eye protection. Avoid contact with skin and eyes.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains or water sources.
- **Clean-Up Methods:** Sweep up and place in a suitable, properly labeled container for disposal.

SECTION 7: Handling and Storage

- **Handling:** Avoid contact with skin, eyes, and clothing. Do not ingest. Use in a well-ventilated area.
- **Storage:** Store in a cool, dry place. Keep container tightly closed.

SECTION 8: Exposure Controls/Personal Protection

- **Exposure Limits:**
 - Silver: OSHA PEL: 0.01 mg/m³, ACGIH TLV: 0.1 mg/m³
- **Engineering Controls:** Ensure adequate ventilation.
- **Personal Protective Equipment:**
 - **Eye/face protection**
 - Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



TINKER & RASOR



US TOLL FREE - 1.833.332.1010

INTERNATIONAL +1.830.253.5621

- **Skin 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.
- **Body Protection**
 - Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- **Respiratory protection**
 - Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- **Control of environmental exposure**
 - Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



US TOLL FREE - 1.833.332.1010

INTERNATIONAL +1.830.253.5621

SECTION 9: Physical and Chemical Properties

- **Appearance:** Silver wire coated with white or gray material
- **Odor:** Odorless
- **Melting Point:** Silver: 961.8°C, Silver Chloride: 455°C
- **Solubility:** Insoluble in water

SECTION 10: Stability and Reactivity

- **Stability:** Stable under normal conditions
- **Incompatible Materials:** Strong acids, ammonia, and oxidizing agents
- **Hazardous Decomposition Products:** Hydrogen chloride and silver oxides

SECTION 11: Toxicological Information

- **Acute Toxicity:** Harmful if swallowed
- **Skin Irritation:** Causes irritation
- **Eye Irritation:** Causes irritation
- **Chronic Effects:** Prolonged exposure may cause argyria (blue-gray discoloration of skin)

SECTION 12: Ecological Information

- **Ecotoxicity:** Very toxic to aquatic life with long-lasting effects
- **Persistence and Degradability:** Not biodegradable
- **Bioaccumulative Potential:** Silver compounds may accumulate in aquatic organisms



US TOLL FREE - 1.833.332.1010
INTERNATIONAL +1.830.253.5621

SECTION 13: Disposal Considerations

- **Disposal Methods:** Dispose of contents/container in accordance with local, regional, and national regulations.

SECTION 14: Transport Information

- **UN Number:** UN3077
- **Proper Shipping Name:** Environmentally Hazardous Substance, Solid, N.O.S. (Silver Chloride)
- **Transport Hazard Class:** 9
- **Packing Group:** III
- **Environmental Hazards:** Marine pollutant

SECTION 15: Regulatory Information

- **US Regulations:**
 - TSCA: Listed
 - CERCLA: Not listed
 - SARA 311/312: Acute and chronic health hazard
- **EU Regulations:** Complies with REACH regulations



US TOLL FREE - 1.833.332.1010
INTERNATIONAL +1.830.253.5621

SECTION 16: Other Information

Date of Preparation: December 15, 2024

Revision Number: 1

Other Information:

Disclaimer:

Tinker & Rasor provides Safety Data Sheets (SDS) for applicable products in compliance with regulatory requirements. These documents are intended to provide information regarding the safe handling, storage, and use of our products. While Tinker & Rasor strives to ensure the accuracy and completeness of the information contained within the SDS, it is provided "as is" without warranty of any kind, either express or implied.

It is the customer's responsibility to review and comply with all applicable safety, health, and environmental regulations when using our products. Tinker & Rasor assumes no liability for any damages, injuries, or losses resulting from the use of the information contained in the SDS or the products themselves. For the most up-to-date SDS, please contact us directly or visit our website.