

SAFETY DATA SHEET

Creation Date 22-Sep-2009

Revision Date 21-Dec-2025

Revision Number 4

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

| | |
|----------------------|--|
| Product Name | Silver gauze |
| Cat No. : | 40936 |
| CAS No | 7440-22-4 |
| Synonyms | Argentum. |
| Recommended Use | Laboratory chemicals. |
| Uses advised against | Food, drug, pesticide or biocidal product use. |

Details of the supplier of the safety data sheet

Company

Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

Classification according to [US] OSHA (29 CFR 1910.1200, 2024)

This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200).

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|-----------|-----------|----------|
| Silver | 7440-22-4 | 100 |

4. First-aid measures

| | |
|--|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. |
| Inhalation | Remove to fresh air. Get medical attention. If not breathing, give artificial respiration. |
| Ingestion | Do NOT induce vomiting. Get medical attention. |
| Most important symptoms and effects | No information available. |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Water spray. Carbon dioxide (CO ₂). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Chemical foam. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature | No information available |
| Explosion Limits | No information available |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Non-combustible.

Hazardous Combustion Products

None known.

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.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 1 | 0 | 0 | N/A |

6. Accidental release measures

| | |
|----------------------------------|---|
| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment as required. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. |

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal.
Up

7. Handling and Storage

| | |
|-----------------|---|
| Handling | Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. |
| Storage. | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Acids. Strong acids. Strong bases. Ammonia. oxygen. |

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|-----------|----------------------------|--|---|---|
| Silver | TWA: 0.1 mg/m ³ | (Vacated) TWA: 0.01 mg/m ³ TWA: 0.01 mg/m ³ | IDLH: 10 mg/m ³ REL = 0.01 mg/m ³ (TWA) REL = 0.9 µg/m ³ (TWA) | TWA: 0.1 mg/m ³ TWA: 0.01 mg/m ³ |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures None under normal use conditions.

Personal Protective Equipment

| | |
|---------------------------------|---|
| 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 and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| Recommended Filter type: | Particle filter. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

Appearance

| | | | |
|---------------------------------|--------------------------|----------------|--|
| Physical State | Solid | | |
| Color | Silver | | |
| Odor | Odorless | | |
| Odor Threshold | No information available | | |
| Property | Values | Remarks | • Method |
| Melting Point/Range | 961 °C / 1761.8 °F | | |
| Softening Point | No data available | | |
| Boiling Point/Range | 2212 °C / 4013.6 °F | | |
| Flash Point | No information available | | Method - No information available |
| Flammability (liquid) | Not applicable | | Solid |
| Flammability (solid,gas) | No information available | | |
| Explosion Limits | No data available | | |

| | | |
|---|--------------------------|-------|
| Autoignition Temperature | No data available | |
| Decomposition Temperature | No data available | |
| pH | No information available | |
| Viscosity | Not applicable | Solid |
| Water Solubility | Insoluble | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/water) | No data available | |
| Vapor Pressure | 10.5 | |
| Density / Specific Gravity | No data available | |
| Bulk Density | Not applicable | |
| Vapor Density | No data available | Solid |
| Particle characteristics | | |

Other Information

| | |
|-------------------|------------------------|
| Molecular Formula | Ag |
| Molecular Weight | 107.87 |
| Evaporation Rate | Not applicable - Solid |

10. Stability and reactivity

| | |
|----------------------------------|--|
| Reactive Hazard | None known, based on information available |
| Stability | Air sensitive. |
| Conditions to Avoid | Exposure to air. Incompatible products. |
| Incompatible Materials | Acids, Strong acids, Strong bases, Ammonia, oxygen |
| Hazardous Decomposition Products | None under normal use conditions |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information**Information on expected route of exposure**

| | |
|------------|--|
| Inhalation | Not an expected route of exposure. |
| Ingestion | No known effect based on information supplied. |
| Eyes | Not an expected route of exposure. |
| Skin | No known effect based on information supplied. |

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------|----------------------|---------------------------|------------------------------|
| Silver | > 2000 mg/kg (Rat) | LD50 > 2000 mg/kg (rat) | LC50 > 5.16 mg/L (Rat) 4 h |

Toxicologically Synergistic Products No information available

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available
Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|-----------|-----------|------------|------------|------------|------------|------------|
| Silver | 7440-22-4 | Not listed |

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable
 Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

Contains a substance which is: Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------|------------------|---|------------|--|
| Silver | Not listed | LC50: = 0.064 mg/L, 96h static (Lepomis macrochirus) LC50: = 0.0062 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: 0.00155 - 0.00293 mg/L, 96h static (Pimephales promelas) | Not listed | EC50: = 0.00024 mg/L, 48h Static (Daphnia magna) |

Persistence and Degradability Insoluble in water

Bioaccumulation/ Accumulation No information available.

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

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

| | |
|-----------------|---------------|
| <u>DOT</u> | Not regulated |
| <u>TDG</u> | Not regulated |
| <u>IATA</u> | Not regulated |
| <u>IMDG/IMO</u> | Not regulated |

15. Regulatory Information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-----------|-----------|------|---|-----------------------------|
| Silver | 7440-22-4 | X | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-----------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Silver | 7440-22-4 | X | - | 231-131-3 | X | X | | X | X | KE-31261 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

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.

| Component | CAS No | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting thresholds |
|-----------|-----------|----------|-------------------------------|---------------------------------|
| Silver | 7440-22-4 | 100 | 1.0 % | - |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

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

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

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) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances RQs | SARA Reportable Quantity (RQ) |
|-----------|--------------------------|---|-------------------------------|
| Silver | 1000 lb | - | 1000 lb 454 kg |

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------|---------------|------------|--------------|----------|--------------|
| Silver | X | X | X | - | X |

U.S. Department of Transportation

Reportable Quantity (RQ): Y
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-----------|-----------|---|---|---|
| Silver | 7440-22-4 | - | Use restricted. See entry 75. (see link for restriction details) | - |

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-----------|-----------|----------|------------------------------|---------------------------|--|
| Silver | 7440-22-4 | Listed | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------|-----------|---|--|----------------------------|------------------------------------|
| Silver | 7440-22-4 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other Information

Prepared By Health, Safety and Environmental Department
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www.thermofisher.com

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Revision Summary Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

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 SDS