



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Silver powder**
PRODUCT NUMBER: 3205
CAS NUMBER: 7440-22-4
SYNONYMS: Argentum, silber
MANUFACTURER:

Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Not a dangerous substance according to the GHS

HMIS CLASSIFICATION:

Health: 1 Fire: 1 Reactivity Hazard: 0

NFPA RATING:

Health: 0 Flammability: 0 Reactivity Hazard: 0

EYE CONTACT: May cause slight to mild irritation of the eyes.

SKIN CONTACT: May cause slight to mild irritation of the skin.

INHALATION: May be irritating to the nose, mucous membranes, and respiratory tract.

INGESTION: May be harmful if swallowed.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Ag

Molecular Weight: 107.87

| CHEMICAL NAME | CAS# | % |
|---------------|-----------|-----|
| Silver | 7440-22-4 | 100 |

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

SECTION 4 FIRST AID MEASURES (Cont.)

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

SECTION 5 FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Use special power for metal fires. Do NOT use water.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Silver oxides.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Small spills can be mixed with vermiculite or sodium carbonate and swept up.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols. Handle under inert gas.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Air sensitive. Store under inert gas. Do not store with oxidizing and acidic materials.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.

| Component | Exposure Limits | Basis | Entity |
|-----------|------------------------|-------|--------|
| Silver | 0.1 mg/m ³ | TLV | ACGIH |
| | 0.01 mg/m ³ | PEL | OSHA |
| | 0.01 mg/m ³ | REL | NIOSH |

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield

SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals

VENTILATION: Provide local exhaust, preferably mechanical.

RESPIRATOR: Use an approved respirator

ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Silver powder

ODOR: None

MOLECULAR WEIGHT: 107.87

BOILING POINT: 2210° C

MELTING POINT: 961.8° C

SPECIFIC GRAVITY: 10.49 gm/ml

SOLUBILITY: Insoluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None

INCOMPATIBILITY: Oxygen, strong acids, strong bases, oxidizing agents, Acetylene, hydrogen peroxide, and ammonia.

DECOMPOSITION PRODUCTS: Silver oxides

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat (male) - >5,000mg/kg. LC Oral – mouse - >10gm/kg. LD Oral – guinea pig - >5gm/kg. TDLo Multiples route – rat – 350mg/kg/43W-1. TDLo Implant – rat – 2400mg/kg. Implant – mouse – 11gm/kg. TD Implant – rat – 2470 mg/kg.

CARCINOGENIC EFFECTS: According to IARC, ACGIH, NTP, and OSHA, No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen. According to EPA this product is not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available

MUTAGENIC EFFECTS: Not available

TETRATOGENIC EFFECTS: Not available

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 ECOLOGICAL DATA

No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

Non-hazardous substance

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory

DSCL (EEC): Listed on the DSCL inventory

SARA 302/304: Not Listed

SARA 311/312: No SARA Hazards

SARA (TITLE 313): Silver

CALIFORNIA PROP. 65: Not Listed

WHMIS CANADA: Not Listed

MASSACHUSETTS RIGHT TO KNOW COMPONENTS: Silver

NEW JERSEY RIGHT TO KNOW COMPONENTS: Silver

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Silver

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 08/14