

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Silver (II) Oxide

Product Code: 9009

Company: Colonial Metals, Inc.
 Building 20
 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
 Telephone Number: 410-398-7200
 FAX Number: 410-398-2918
 E-Mail : info@colonialmetals.com
 Web Site: www.colonialmetals.com



www.colonialmetals.com

Emergency Response: Supplier Emergency Contacts & Phone Number
 Chemtrec: 800-424-9300
 World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

GHS07

GHS03

BLANK

BLANK

Hazard Pictograms:



Signal Word: Danger

Hazard Category: Specific target organ tox, single exp. Cat 3 (resp irrit)
 Skin corrosion/irritation Cat 2
 Serious eye damage/eye irritation Cat 1
 Acute tox, oral Cat 4
 Oxidizer Cat 2

Hazard Statements: H335: May cause respiratory irritation
 H315: Causes skin irritation
 H318: Causes serious eye damage
 H302: Harmful if swallowed
 H272: May intensify fire; oxidizer

Precautionary Statements: P260: Do not breathe dust/fume/gas/mist/vapors/spray
 P264: Wash thoroughly after handling
 P270: Do not eat, drink or smoke when using this product
 P271: Use only outdoors or in a well-ventilated area
 P272: Contaminated work clothing should not be allowed out of the workplace
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P284: Wear respiratory protection

Hazards not otherwise classified: Chronic/Carcinogenicity Effects:
 Long term exposure to silver and silver salts can lead to the condition known as argyria—a general gray pigmentation of the skin and mucous membranes.

Conditions Aggravated By Exposure:

May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver). May be irritating to skin, eyes and respiratory tract.

Conditions Aggravated By Overexposure:

Prolonged respiratory absorption can lead to grayish blue discoloration of skin, known as arquria or arqurosis Not known to be health threatening

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Silver Oxide	Irritant/Oxidizer	1301-96-8	99.9
Chemical Family: Group 1B Metal Salts			
Chemical Formula: AgO			
Synonyms: Silver (II) Oxide, Argentite, Silver Peroxide			
To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated. Avoid elevated temperature and exposure to light. Incompatible with hydrogen peroxide, carbon monoxide, strong acids, ammonia, acetylene, and most metals and organic matter. This product is a strong oxidizer. Avoid contact with material that may cause a fire.			

Section 4: First Aid Measures

General Info: Consult a Physician. Show this safety data sheet to the doctor in attendance.

Notable Exposure symptoms: Irritation to skin, eyes and areas of contact.

symptoms:

If ingested: Rinse mouth. Seek immediate medical attention immediately. Clear the airway and administer artificial respiration if not breathing.

If swallowed, do not induce vomiting unless directed to do so by medical personnel.

If inhaled: Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get immediate medical attention.

Skin contact: Flush area for 15 minutes with water and wash with soap and water. If discomfort occurs or persists, contact a physician. Remove contaminated clothing and shoes and wash before reuse.

Section 5: Fire Fighting Measures

General Info: Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Extinguishing Method / Equipment: Use water spray, foam, dry chemical, carbon dioxide or medium for primary source

Method / Equipment:

Hazardous Decomposition Info: . Can decompose to emit oxygen at high temperatures (supports combustion).

Decomposition Info:**Section 6: Accidental Release Measures**

Personal precautions, protective equipment and procedures: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate respiratory protective equipment and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so, For personal protection, see section 8 of the SDS.

Containment Equipment and Procedures: Contain actively spilling material if safe and easy to do so. Do not let product enter drains. Sweep up and placed in a proper vessel for recovery or disposal. Avoid raising dust. Ventilate and wash spill site after cleanup is complete.

Cleanup Procedures: Contain spillage and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations.

Section 7: Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid creating and breathing dust/vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling. Keep away from ignition sources.

Incompatibilities: Light Sensitive, Strong oxidizing agents

Section 8: Exposure Control / Personal Protection

General / Engineering Controls: Ventilation: Local Exhaust: Required in handling area

Controls: Mechanical: Desirable to insure concentration of material below TLV/TWA levels
Other: Closed Ventilation system - Dust (Laboratory Fume Hood)

Work Clothing: Protective work clothing which covers skin and prevents exposures.

Eye/face protection: Wear safety glasses with side shields or goggles or face shield.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: NIOSH approved chemical cartridge respirator for particulates and dust or self-contained breathing apparatus with full face shield.

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: >100 °C	Freezing Point: N/A	
Color: Charcoal Gray	Boiling Point/Range: N/A	pH: N/A	
Molecular Wt.: 123.87 g/mol	Odor: None	Water Solubility: Insoluble	
Specific Gravity: 7.143	Flash Point: N/A	Part. Coeff (n-octanol/water): N/A	
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Vapor Density: N/A	This product will decompose @ 130 degree C
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A	

Section 10: Stability and Reactivity

General: This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources.

Stability: Stable

Conditions to Avoid: Incompatible materials, combustible Elevated temperature, exposure to light

Incompatible materials: Alkalies, ammonia, hydrogen peroxide, hydrogen, and organic matter

Decomposition products: Strong oxidizing agents, strong acids, ammonia, amines

Section 11: Toxicological Information

General Information: To the best of our knowledge the chemical, physical, and toxicological effects of this compound have not been thoroughly investigated.

Toxicological Information (product): No Data Available - May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver).

Section 12: Ecological Information

General information: No data available

Aquatic toxicity: No data available

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Place in a sealed container. Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation
NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

Container disposal: Treat empty containers with extra care. Consult waste contractor.

RCRA Information: EPA HW NO: D011 (Ag CAS NO.: (7440-22-4) 74)

Section 14: Transport Information

DOT: Proper Shipping Name:
Oxidizing Solid, N.O.S (Silver Oxide)
Hazard Class:
5.1
DOT Identification Number:
1479
DOT Shipping Label:
OXIDIZER (Contains Silver Oxide) N.O.S.
Packaging Requirements:
Packaging Group II

IATA: Same as DOT regulations. Always consult IATA manual before shipping.

Section 15: Regulatory Information

TSCA: This product is TSCA Listed

SARA: SARA Hazard Classes
Acute Health Hazard

SARA Section 313 Notification

This chemical is not at a high enough concentration to be reportable under Section 313.

State Regulations: CAS# 13014-96-8 is not listed on any state lists

Canadian DSL: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. This product has a WHMIS classification of C, D2B.

European Union (EU) Symbol of Hazards: O,C

Regulatory Information: **Indications of Hazards:** Oxidizer, corrosive
R: 34, 8

Risk Phrase: Causes burns. Contact with combustible material may cause fire.

S: 17, 26, 37/39

Safety Phrase: Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection

Section 16: Other Information

NFPA Rating

Health: 3
Fire: 0
Reactivity: 0
Oxidizer

HMIS Rating

Health: 3
Fire: 0
Reactivity: 0
Personal
Protection: J

Precautionary Label

Irritant Oxidizer

Disclaimer: *In compliance with the OSHA Hazard communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.*

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believed to be correct; however, you (the customer), should perform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

Colonial Metals, Inc.

SDS Author: John Kerchner

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