

SILVER OXIDE
SAFETY DATA SHEET
DATE OF LAST REVISION: 07/22/15

Section 1: Identification

Product Name: Silver Oxide
CAS Number: 1301-96-8 / **EC Number:** 215-098-2
Company: Angstrom Sciences, Inc.
40 South Linden Street
Duquesne, PA 15110
For more information call: 412-469-8466
(Monday - Friday 9:00 AM -5:00 PM EST)

Section 2: HAZARD IDENTIFICATION

Signal Word: Danger



Hazard Statements: H272: May intensify fire; oxidizer
H314: Causes severe skin burns and eye damage

Precautionary Statements: P221: Take any precaution to avoid mixing with combustibles
P210: Keep away from heat/sparks. No smoking
P303 + P361 + P353: If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305 + P351 + P338: If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing

HMIS Health Ratings (0-4):
Health: 3
Flammability: 0
Physical: 2

Section 3: Composition/Information on Ingredients

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Chemical characterization: Ceramic

Additional Names: Silver (II) oxide

CAS# Description: 1301-96-8

Percentage: 100 wt%

EC number: 215-098-2

Section 4: FIRST AID MEASURES

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None

Important Symptoms: Causes severe skin burns

Causes serious eye damage

Skin Contact: Wash affected area with mild soap and water. Remove any contaminated clothing.

Inhalation: Remove victim to fresh air, supply oxygen if breathing is difficult. Seek medical attention if required.

Ingestion: Seek medical attention

Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue Rinsing.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: No special restrictions - Use suitable extinguishing agent for surrounding material and type of fire.

Flammability: Non-flammable by itself

Oxidizer - may cause fire by reaction with reducing agents or combustibles.

Special Fire Fighting Procedure: Use full-face, self contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

Section 7: HANDLING AND STORAGE

Handling Precautions for safe handling: Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in Section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

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Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible Exposure Limits: N/A
Threshold Limit Value: N/A
Special Equipment: None
Respiratory Protection: Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.
Protective Gloves: Rubber gloves
Eye Protection: Safety glasses or goggles
Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Powder, Granules, pellets, Sputtering target, Custom parts
Color: Grey
Odor: Odorless
Water Solubility: Insoluble
Boiling Point: N/A
Melting Point: >100° C
Flash Point: N/A
Autoignition Temperature: N/A
Density: 7.44 g/cm³
Atomic Weight: 123.87 g/mol

Section 10: STABILITY AND REACTIVITY

Reactivity: Reducing agents, Flammable substances, Acetylenes, Ammonia, Organic materials, metal powders, Water
Chemical Stability: Stable under recommended storage conditions
Incompatible Conditions: Moisture, Light
Hazardous Decomposition Products: Metal Oxide Fume

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:
Eyes: Causes serious eye damage

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Skin: Causes severe skin burns

Ingestion: Causes burning effect

Inhalation: Causes burning effect

Chronic: Absorption of silver compounds by ingestion, inhalation or through broken skin can cause argyria, a permanent bluish-grey discoloration of the skin, conjunctiva and mucous membranes.

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A

Median Lethal Dose: N/A

Carcinogen: N/A

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: Low

Persistence Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: N/A

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, national, and international regulations

Section 14: TRANSPORT INFORMATION

Hazardous: Hazardous for transportation



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Hazard Class: 5.1 Oxidizing substances
Packing Group: II for powder, III for pieces/target
UN Number: UN3085
Proper Shipping Name: Oxidizing solid, n.o.s. (Silver oxide)

Section 15: REGULATORY INFORMATION

Sec 302 Extremely Hazardous: No
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: yes

Section 16: OTHER INFORMATION

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.