LTS Research Laboratories, Inc.
Safety Data Sheet
Silver Oxide

1. Product and Company Identification

Trade Name:	Silver oxide
Chemical Formula:	Ag_2O
Recommended Use:	Scientific research and development
Manufacturer/Supplier:	LTS Research Laboratories, Inc.
Street:	37 Ramland Road
City:	Orangeburg
State:	New York
Zip Code:	10962
Country:	USA
Tel #:	855-587-2436 / 855-lts-chem
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger

Hazard Statements:
H271 May cause fire; strong oxidizer
H318 Causes serious eye damage

Precautionary Statements:
P221 Take any precaution to avoid mixing with combustibles
P210 Keep away from heat/sparks. No smoking.
P305+P351 If in eyes: Rinse cautiously with water for several minutes.
P306+P360 If on clothing: Rinse contaminated clothing and skin with plenty of water before removing clothes.

HMIS Health Ratings (0-4):

Health:	2
Flammability:	0
Physical:	3

3. Composition

Chemical Family:	Ceramic
Additional Names:	Silver(I) oxide
Silver oxide (AgO):	
Percentage:	100 wt%
CAS #:	20667-12-3
EC #:	243-957-1

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Fire and Explosion Hazards Data

Flammability:	Non-flammable. Oxidizer – may cause fire by reaction with reducing agents or combustibles.
Flash Point:	N/A
Autoignition Temperature:	N/A
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

If Material Is Released/Spilled:	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.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container.
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.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	0.01 mg/m^3 as Ag, long-term value
Threshold Limit Value:	0.01 mg/m^3 as Ag, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator, NIOSH approved
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Dark brown
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	0.013 g/L
Boiling Point:	N/A
Melting Point:	230 °C
Density:	7.2 g/cc
Molecular weight:	231.74 g/mol

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Reducing agents, Flammable substances, Acetylenes, Ammonia, Organic materials, Metal powders, Water
Incompatible Conditions:	Moisture, Light
Hazardous Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes serious damage
Skin:	Causes 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:	2820 mg/kg (rat by mouth)
Carcinogen:	N/A

12. Ecological Information

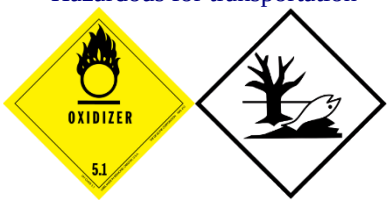
Notes:	Very toxic for aquatic organisms

13. Disposal Considerations

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

14. Transportation Data

Hazardous:	Hazardous for transportation



Hazard Class:	5.1 Oxidizing substances
Additional Labels:	Environmental hazard (DOT, IMDG)
Packing Group:	II
UN Number:	UN1479
Proper Shipping Name:	Oxidizing solid, n.o.s. (Silver(I) oxide)

15. Regulatory Information

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

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.

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