1 - Product Identification

**Synonyms:** ARGENTOUS OXIDE; DISILVER OXIDE

**CAS:** 20667-12-3

**Formula Weight:** 231.74 (93.1% Silver metal by weight)

**Chemical Formula:** Ag20

**Reportable Quantity:** 70, 455, 1000 grams

**Supplier:** Lessit Komet Chemi; [www.silvernitrate.org](http://www.silvernitrate.org) 1(318)480-0084

**Distributed by:** Thesetmaster Fulfillment LLC, P.O.Box 437128, Chicago IL 60643

2 - COMPOSITION

**SILVER OXIDE:** 98%

3 - Hazards

**Health Rating:** 2 -, causes eye and skin irritation. Prolonged exposure will stain skin, and cause burns. Inhalation may cause irritation and burns to the upper respiratory track.

**Flammability Rating:** 0 - None

**Reactivity Rating:** 1 - Normally stable, even under fire exposure conditions, unreactive with water.

**Lab Protective Equip:** Safety goggles and/or face shield. Latex gloves. Good ventilation.

**Storage Color Code:** Yellow (Reactive)

**Potential Chronic Health Effects:** No known carcinogenic effects.

4 – FIRST AID MEASURES

**Inhalation:** Remove to fresh air. Dusts will sting the nasal passages. Seek medical attention.

**Ingestion:** If swallowed, Do not induce vomiting. Give a quantity of milk or water containing table salt water. Get medical attention immediately if the quantity ingested is more than a gram.

**Skin Contact:** Wash immediately with soap and water for at least 15 minutes. Stains usually vanish within a week. Stains on finger nails can be buffed away.

**Eye Contact:** Seek medical attention. Immediately flush eyes with plenty of distilled water for at least 15 minutes.

5 – FIRE HAZARDS

**Flammability:** Non-flammable

**Heating:** decomposition of product releases oxygen gas.

**Explosion:** Reaction with ammonia will form explosive Fulminating Silver.

6 – ACCIDENTAL RELEASE MEASURES

Wear protective gloves, goggles, protect product from getting on the skin and clothing.

**Special Note:** Disposal of even small quantities of silver oxide in waste systems connected to a septic tank is will to destroy septic enzymes which would require, flushing out and seeding with fresh enzymes.

7 – HANDLING AND STORAGE

Wear protective gear; gloves, goggles, and protect clothing from accidental spills.

Do not store near combustible materials. Avoid breathing dusts.

Store in a closed container, keep in a dark and damp-free ventilated area.

Silver Oxide is light sensitive and does not absorb moisture.

8– EXPOSURE LIMITS
OSHA Permissible Exposure Limit (PEL): 0.01 mg/m3 (TWA) as silver metal dust
ACGIH: 0.01 mg/m3 (TWA) as soluble silver compounds

9 – PHYSICAL CHARACTERISTICS

Appearance: Brownish black powder
Odor: Odorless.
Solubility: very slightly in water, soluble in acid and alkali solutions.
Specific Gravity: 7.1g/cc
pH: N/A
Boiling Point: 210°C (300°F) Decomposes in air.
Melting Point: 300°C (571°F) Decomposes in air.
Vapor Density (Air=1): N/A
Vapor Pressure (mm Hg): N/A

10 – STABILITY AND REACTIVITY

Stability: Stable
Heating: decomposition of product releases oxygen gas.
Incompatibility: Reaction with ammonia will form explosive Fulminating Silver.
Corrosivity: Corrosive to stainless steel, non-corrosive to glass
Elevated temperatures dry silver oxide will decompose and cause to burn most surfaces including glass, stone, steel and plastics.

11 – TOXICOLOGY

Oral toxicity (LD50): 1027 mg/kg [Mouse].

12 – ECOLOGICAL

Products of Biodegradation: Long term degradation products may arise.

14 – TRANSPORT

Domestic (Land, DOT)
Hazard Class: 5.1
Packing Group: III
UN number: UN1479
ORM-D: USPS can ship within United States only.
Outer Packaging: A strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
Mailability:
International Mail: via surface transportation
Domestic Mail: Permitted via air or surface transportation.

16 – ADDITIONAL INFORMATION

SDS Creation Date 6/25/2016 Latest revision:7/9/2016

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