SECTION 1  PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Silver (I) Oxide
PRODUCT NUMBER: 3238
CAS NUMBER: 20667-12-3
SYNONYMS: Argentous oxide, silver monoxide

MANUFACTURER:
Prochem, Inc.
826 Roosevelt Road
Rockford, IL  61109
PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

SECTION 2  HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram

Signal Word  Danger

Hazard Statements

H271  May cause fire or explosion; strong oxidizer.
H318  Causes serious eye damage
H410  Very toxic to aquatic life with long lasting effects

Precautionary Phrases

P210  Keep away from heat/sparks/open flames/hot surfaces
P220  Keep/store away from clothing/combustible material
P221  Take any precaution to avoid mixing with combustibles.
P273  Avoid release into the environment
P280  Wear protective gloves/protective clothing/eye protection/face protection
P283  Wear fire/flame resistant/retardant clothing
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P306+P360  IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P310  Immediately call a POISON CENTER or doctor/physician.
P370+P378  In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P371+P380+P375  In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
SECTION 2  HAZARDS IDENTIFICATION (Cont.)

HMIS CLASSIFICATION:
Health: 2  Fire: 0  Reactivity Hazard: 2

NFPA RATING:
Health: 2  Flammability: 0  Reactivity Hazard: 2  Specific Hazard: OX

EYE CONTACT: Causes slight to mild irritation of the eyes.

SKIN CONTACT: Causes slight to mild irritation of the skin. Contact with the skin can lead to formation of dark blotches (silver staining)

INHALATION: Irritating to the nose, mucous membranes, and respiratory tract.

INGESTION: Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Ag₂O

Molecular Weight: 231.74

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS#</th>
<th>%</th>
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<tbody>
<tr>
<td>Silver (I) Oxide</td>
<td>20667-12-3</td>
<td>100</td>
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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 the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical assistance 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: Not a flammable material

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Use carbon dioxide, extinguishing power, or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: None

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. This material is an oxidizer. Beware when handling near organic materials such as word, paper, and fats – Keep away from combustible materials.

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. Use with adequate ventilation. Keep container closed when not in use. Avoid formation of dust. Keep away from sources of ignition – no smoking. Substance/product can reduce the ignition temperature of flammable substances. This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.
SECTION 7  HANDLING AND STORAGE (Cont.)

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Keep away from combustible material. Protect from exposure to light.

SECTION 8  EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.
EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.
SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete flame retardant suit.
VENTILATION: Provide local exhaust, preferably mechanical.
RESPIRATOR: Use an approved respirator.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Dark brown to black powder
ODOR: None
MOLECULAR WEIGHT: 231.74
BOILING POINT: Not available
MELTING POINT: 230° C (dec.)
SPECIFIC GRAVITY: 7.143 gm/ml
VAPOR DENSITY: No data available
SOLUBILITY: Slightly soluble

SECTION 10  STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Reacts with reducing agents. Reacts with flammable substances.
CONDITIONS TO AVOID: Light
INCOMPATIBILITY: Reducing agents, flammable substances, organic materials, metal powders, and light.
DECOMPOSITION PRODUCTS: None

SECTION 11  TOXICOLOGICAL DATA

CARCINOGENIC EFFECTS: No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.
MUTAGENIC EFFECTS: Not available
TETRATOGENIC EFFECTS: Not available
RTECS: VW4900000

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 accordance to local, state, and federal regulations.
SECTION 14 TRANSPORTATION DATA

UN1479
Oxidizing solid, n.o.s.
(Silver (I) oxide)
CLASS 5.1
PG II

Marine Pollutant: No

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: Reactivity Hazard, Acute Health Hazard
SARA (TITLE 313): Disilver Oxide
CALIFORNIA PROP. 65: Not Listed
WHMIS CANADA: Class C: Oxidizing material Class D-2B: Toxic material causing other toxic effects.
NEW JERSEY RIGHT TO KNOW COMPONENTS: Silver Oxide
PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Silver Oxide

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