SDS

永华化学股份有限公司
YONGHUA CHEMICAL CO., LTD.

Silver oxide

1. Product Identification

Synonyms: Argentous oxid

CAS No.: 20667-12-3

Manufacturer/supplier:

Yonghua Chemical Co., Ltd.

Address: Xiangqiao Village, Zhitang(Heshi)Town, Changshu City 215500,

Jiangsu Province, China

Emergency phone：0086 512 52549653

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2. Composition/Information on Ingredients

CAS No.	Chemical Name	Content	EINECS#
20667-12-3	Silver oxide	≤100	243-957-1

Hazard Symbols: XI O

Risk Phrases: 36/38 8

3. Hazards Identification

EMERGENCY OVERVIEW

Irritating to eyes and skin. Contact with combustible material may cause fire.

Potential Health Effects

Eye:

Contact with eyes may cause severe irritation, and possible eye burns.

Skin:

May cause severe irritation and possible burns.

Ingestion:

Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Chronic:

Chronic inhalation or ingestion of silver salts may cause argyria characterized by a permanent blue-gray discoloration of the eyes, skin, mucous membranes, and internal organs. This malady results from the accumulation of silver in the body.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

5. Fire Fighting Measures

General Information:

Strong oxidizer. Contact with other material may cause fire. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Remove all sources of ignition.

7. Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Do not get on skin or in eyes. Do not ingest or inhale. Do not store near combustible materials.

Storage:

Keep away from sources of ignition. Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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8. Exposure Controls/Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 20667-12-3: Japan: (listed as silver compounds): 0.01 mg/m3 OEL (as Ag) Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear impervious gloves.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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9. Physical and Chemical Properties

Physical State: Solid

Color: brown-black

Odor: Odorless

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 392 deg F

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Not available.

Solubility in water: Negligible in water.

Specific Gravity/Density: 7.14

Molecular Formula: Ag2O

Molecular Weight: 231.7358

10. Stability and Reactivity

Chemical Stability:

Stable. Absorbs carbon dioxide from the air.

Conditions to Avoid:

Incompatible materials, combustible materials, organic materials, reducing agents.

Incompatibilities with Other Materials:

Reacts dangerously with ammonia. Grinding silver oxide with metal sulfides, selenium, sulfur, or phosphorus can cause ignition.

Hydrogen sulfide may ignite when in contact with silver oxide.

Incompatible with hydrazines, amines, sulfur, metal sulfides, and carbon monoxide.

Hazardous Decomposition Products:

Oxygen, silver fumes.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

RTECS#:

CAS# 20667-12-3: VW4900000 LD50/LC50:

CAS# 20667-12-3: Oral, mouse: LD50 = 1027 mg/kg; Oral, rat: LD50 = 2820 mg/kg.

Carcinogenicity:

Silver Oxide - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

12. Ecological Information

13. Disposal Considerations

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

14. Transport Information

IATA

Shipping Name: OXIDIZING SOLID, NOS

Hazard Class: 5.1

UN Number: 1479

Packing Group: II

IMO

Shipping Name: OXIDIZING SOLID, NOS

Hazard Class: 5.1

UN Number: 1479

Packing Group: II

RID/ADR

Shipping Name: OXIDIZING SOLID, NOS

Hazard Class: 5.1

UN Number: 1479

Packing group: II

15.Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI O

Risk Phrases:

R 36/38 Irritating to eyes and skin.

R 8 Contact with combustible material may cause

fire.

Safety Phrases:

S 22 Do not breathe dust.

WGK (Water Danger/Protection)

CAS# 20667-12-3: 1

Canada

CAS# 20667-12-3 is listed on Canada's DSL List.

CAS# 20667-12-3 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 20667-12-3 is listed on the TSCA inventory.

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16. Other Information

Yonghua Chemical Co., Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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