

# SILVER OXIDE

Rochester Silver Works produces high-quality Silver Oxide and other silver derivatives, such as Silver Carbonate. All materials are generated from high-purity stock, ensuring consistency and reliability in your applications.



#### **Key Features**

- Purity: Derived from high-purity stock for superior quality.
- Versatility: Suitable for a wide range of industrial and consumer applications.
- · Packaging: Customizable packaging options from small to large scale.

#### **Benefits**

- High Energy Density: Ideal for use in batteries for watches, hearing aids, and small devices.
- Catalytic Properties: Enhances reaction rates in organic oxidation reactions and chemical synthesis.
- Antimicrobial: Helps reduce infections in medical devices and maintains water quality in purification systems.
- Reflective: Provides high reflectivity in optical coatings.

### **Applications**

- Electronics: Used in batteries and conductive pastes for electronics.
- Catalysis: Catalyst in organic oxidation reactions and chemical synthesis.
- Medical: Incorporated into medical device coatings for antimicrobial purposes.
- Water Treatment: Inhibits bacterial growth in water purification.
- Optics: Employed in high-reflectivity mirrors and optical coatings.
- Cleaning: Polishing agents for silverware and jewelry maintenance.



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### SILVER OXIDE PHYSICAL PROPERTIES

Appearance	Brown or black solid
Apparent Density	0.5 – 1.7 g/cm3
Tap Density	1.1-3.5 g/cm3
Particle Size	2-8 cm

## SILVER OXIDE CHEMICAL COMPOSITION

Parameter	Specification	Typical Values
% Assay (w/w as Ag <sub>2</sub> O)	>99.8	>99.8
% Moisture (w/w)	<0.2	0.05-0.15
% Caronnates (w/w)	<0.25	<0.02-0.07

<sup>\*</sup> also available at up to 20% moisture

Maximum	ppm	Typical Values
Choride	15	<8-12
Nitrates	25	5-12
Copper	10	<0.05-0.15
Iron	10	0.1-3.5
Nickel	10	0.05-1.5
Lead	10	0.02-0.1
Sodium	10	2-4
Other Trace Metals	20	<20



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