



Expect Service

Radiation Products Design Inc

SAFETY DATA SHEET

RPD INFORMATION

Address	5218 Barthel Industrial Drive Albertville, MN 55301
Website	www.rpdinc.com
Email	sales@rpdinc.com
Phone	763-497-2071 or 800-497-2071
Fax	763-497-2295

RAW MATERIAL INFORMATION

SILVER PLATING

Pyromet Safety Data Sheet

5 Commerce Drive, Aston, PA 19014 Phone: (610) 497-1743

Fax: (610) 494-3349

Safety Data Sheet – SILVER

Section 1. Product Identification

Product: SILVER as Bars, Anodes, Strip, Wire, Crystal or Shot **Formula:** Ag

C.A.S. Number: 7440-22-4 **Molecular Weight:** 107.9

Manufacturer's Name & Address: Prepared Date: May 2013; Rev Jul 2014

Pyromet

5 Commerce Drive

Aston, PA 19014

Emergency Phone: (610) 497-1743

Section 2. Hazard Identification

Overview: The alloys as sold in solid form are generally considered non-hazardous. However, if

the process involves grinding, melting, cutting or any other process that causes a release of dust

or fumes, hazardous levels of airborne particulates could be generated.

Primary Routes of Entry: Inhalation, Skin contact.

Chronic - Human Effects and Symptoms of Overexposure: Excessive or chronic exposure, skin contact or inhalation, may lead to a condition called Argyrosis – a local or general discoloration of the eyes, skin and mucous membrane, where gray/blue patches of pigmentation are formed.

Acute: No known effects from silver products

Is this material considered carcinogenic by

NTP? : No OSHA? : No IARC? : No NIOSH? : No ACGIH? : No

Section 3. Composition

Component: Silver **Percent of Mixture:** 99.9%+

Refined silver will be within ASTM Standard Specifications.

Section 4. First Aid Measures

Eyes: Dust or powder should be flushed from eyes with running water for 15 minutes. If irritation persists, seek medical attention.

Skin: Dust or powder can be removed with soap and water. If irritation persists obtain medical assistance.

Ingestion: Obtain medical assistance at once.

Inhalation: Remove from contaminated environment. Obtain medical assistance.

Pyromet Safety Data Sheet

5 Commerce Drive, Aston, PA 19014 Phone: (610) 497-1743
Fax: (610) 494-3349

Section 5. Fire Fighting and Explosion Hazard Data

Flash Point: Not Applicable (does not burn) **Auto-ignition:** N/A

Flammability Class: N/A **Lower Explosive Limit:** N/A

Unusual Fire and Explosion Hazards: None **Upper Explosive Limit:** N/A

Special Fire Fighting Procedures: Do not use water to extinguish fires around operations involving molten metal due to the potential for steam explosion.

Extinguishing Materials: (Non-flammable)

Section 6. Accidental Release Measures

Steps to be taken in case material is released or spilled:

Collect material for reuse. Can use wet sweeping or HEPA vacuum for dust or powder clean up. Do not use compressed air.

Waste Disposal: Send to refinery for recovery. Waste disposal should be in accordance with federal, state, and local environmental control regulations.

SARA Title III Notifications and Information: Reportable quantity 1,000 lbs.

Section 7. Handling and Storage

In solid form, no special requirements.

Section 8. Exposure Controls / Personal Protection

Component: Silver **Percent of Mixture:** 100%

Exposure limits in air: 0.01 mg/m³ OSHA **ACGIH:** 0.1 mg/m³

Safety glasses and gloves are recommended.

Respiratory protection not normally required unless airborne dust concentrations exceed OSHA

PEL or ACGIH TLV.

Local exhaust ventilation recommended during operations where dust or fumes are generated.

Wash thoroughly after handling.

Section 9. Physical and Chemical Properties

Boiling Point: 4014°F; 2212°C **Melting Point:** 1764°F; 962°C

Vapor Pressure: N/A **Vapor Density:** (Air=1) N/A

Specific Gravity: 10.5 **Solubility (H₂O):** Insoluble

Percent Volatiles: N/A **Evaporation Rate:** Solid N/A

Density: 5.527 troy ounces/in³ at 68°F : 10.49g/cm³

Electrical Resistivity: 1.642x10⁻⁶ Ohm-cm

Thermal Conductivity: 2974 BTU-in/(hr-ft²-°F) : 429 W/(m-K)

Thermal Expansion: 1.06x10⁻⁵ in/(in-°F) : 1.9x10⁻⁵ °C⁻¹

Appearance: Grey-white metal in form of wire, rod, tubing, sheet, bar, strip, or grain

Odor: None; solid at room temperatures

Pyromet Safety Data Sheet

5 Commerce Drive, Aston, PA 19014 Phone: (610) 497-1743

Fax: (610) 494-3349

Section 10. Stability and Reactivity Data

Stability: Stable

Conditions to Avoid: None

Incompatibility (material to avoid): Acetylene, Ammonia, Acids and Strong Oxidizers

Hazardous Decompositions Products (including combustions products): None

Hazardous Polymerizations: Will Not Occur

Conditions to Avoid: None

Section 11. Toxicological Information

There is no toxicological information available. Under normal use of the solid form there are few health hazards. Reference section 2.

Section 12. Ecological Information

In solid form this material poses no special environmental problems. Powder or dust may have significant impact on air and water quality. Emissions, spills and releases should be controlled immediately.

Section 13. Disposal Considerations

This material should be reclaimed.

Section 14. Transportation Information

Hazard Class: Not controlled by DOT, IATA, ICAO, or IMO Regulations

Section 15. Regulatory Information

OSHA: The Hazard Communication Standard, 29 CFR 1910.1200, considers components of this material hazardous.

Section 16. Other Information

Prepared by: C. S. Smith, J. DiNatale

Latest Revision: N/A. This SDS replaces the Jan 2009 version in whole. Reformatted to conform to OSHA HazCom 2012 Final Rule to align with GHS.

Date: 31 May 2013

Revised: 11 July 2014

Disclaimer of Expressed and Implied Warranties: Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to

the accuracy or completeness of the information contained herein, and assume no responsibility

regarding the suitability of this information for the users intended purposes or for the consequences of this product's use. Each individual must use his or her own determination as to

the suitability of the information for such purposes or uses.