

## Safety Data Sheet

**Product No. 61-310 Silver Powder, 7-15 $\mu$**

**Issue Date (11-04-15)**

**Review Date (08-31-17)**

---

### Section 1: Product and Company Identification

**Product Name: Silver Powder, 7-15m**

Synonym: None

**Company Name**

**Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477**

Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

**CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day**

**CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day**

---

### Section 2: Hazard Identification

#### 2.1 Classification of the substance or mixture

This substance is not classified as hazardous to health or the environment according to CLP regulation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC: NA.

#### 2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008: Not applicable. Label elements are void.

#### 2.3 Other hazards

**Health Effects:**

NFPA Hazard Rating: ND

HMIS® Hazard Rating: Health: 1; Fire: 0; Physical Hazard=1

(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: NA

#### Emergency overview

Appearance: Silver powder.

Immediate effects: Irritant. Potential health effects depend upon route of entry.

#### Potential health effects

Primary Routes of entry: Inhalation, skin, eyes, ingestion.

Signs and Symptoms of Overexposure: Exposure to silver may produce argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and the respiratory tract.

Eyes: Exposure of the eyes to this material in powder form may produce localized argyria and/or irritation.

Skin: Skin contact with this material in solid forms is not known to be hazardous. In finely divided form, skin contact may produce localized irritation, skin discoloration, and/or contact dermatitis.

Ingestion: Ingestion of this material in finely divided form may produce vomiting, abdominal pain, and/or collapse.

Inhalation: Acute inhalation exposure to silver may produce argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and the respiratory tract.

Chronic Exposure: Exposure to silver may produce argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and respiratory tract. Chronic ingestion of silver can similarly lead to an accumulation of silver in the eye (argyrosis) and in other organs.

Chemical Listed as Carcinogen or Potential Carcinogen: No  
See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

---

**Section 3: Composition / Information on Ingredients**

<b>Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)</b>	<b>%</b>	<b>OSHA PEL mg/m3</b>	<b>ACGIH TLV mg/m3</b>	<b>NTP Carcinogen</b>	<b>IARC Carcinogen</b>	<b>OSHA regulated Carcinogen</b>
Silver (7440-22-4) EC No. 231-131-3	99.9	0.01	0.1	No	No	No

---

**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

Eye(s) Contact: Rinse opened eye for several minutes under running water, then consult a doctor.  
Skin Contact: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.  
Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek medical advice.  
Ingestion: Seek medical treatment.

---

**Section 5: Fire Fighting Measures**

Flash Point: ND  
Flammable Limits: ND  
Auto-ignition point: ND  
Fire Extinguishing Media: Special powder for metal fires. Do not use water.  
Special Fire Fighting Procedures: Wear self-contained respirator operated in pressure demand or other positive-pressure mode and fully-protective impervious suit.  
Unusual Fire and Explosion Hazards: In finely divided form, this material may react vigorously or ignite when exposed to incompatible materials. Explosions or fires involving this material may release potentially toxic emissions.  
Hazardous combustion products: Metal oxide fumes.  
DOT Class: 9

---

**Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled.  
Personal precautions, protective equipment and emergency procedure: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.  
Environmental precautions: Do not allow material to be released to the environment without governmental permits.  
Methods and materials for containment and cleanup: Pick up mechanically.  
Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

---

## Section 7: Handling and Storage

Precautions to be taken in Handling and Storage:

Ensure good ventilation in the workplace. Keep container tightly sealed. Store in a cool, dry place. Do not store together with oxidizing and acidic materials.

Storage temperature: ND

Storage Pressure: NA

---

## Section 8: Exposure Controls / Personal Protection

### Engineering Controls

Ventilation required: Use mechanical local exhaust ventilation adequate to maintain airborne concentrations within their respective OSHA PEL.

### Personal Protection Equipment

Respiratory protection: Use suitable respirator when high concentrations are present.

Protective gloves: Impervious gloves.

Skin protection: Protective work clothing.

Eye protection: Safety glasses.

Additional clothing and/or equipment: Safety shower and eyewash station.

### Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

---

## Section 9 Physical and Chemical Properties

Appearance and Physical State: Silver powder.

Odor (threshold): Characteristic (ND)

Specific Gravity (H<sub>2</sub>O=1): 10.5 g/cm<sup>3</sup>

Vapor Pressure (mm Hg): NA

Vapor Density (air=1): NA

Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA

Boiling Point: 2210 °C

Melting point: 961.8 °C

pH: ND

Solubility in Water: Insoluble

Molecular Weight: 107.87

---

## Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Avoid incompatible materials.

Materials to Avoid (Incompatibility): Acetylene, ammonia, nitric acid, ethyleneimine, chlorine trifluoride, sulfuric acid, inorganic and organic peroxides, peroxyformic acid, bromoazide, oxalic acid, 1-bromo-2-propyne, tartaric acid, permonosulfuric acid.

Hazardous Decomposition Products: Heating to elevated temperatures may volatilize silver as fume.

Hazardous Polymerization: Does not occur.

---

## Section 11: Toxicological Information

Results of component toxicity test performed: ND

Human experience: Very hazardous in case of ingestion and inhalation.

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

---

## Section 12: Ecological Information

Ecological Information: Do not allow material to be released to the environment without proper governmental permits. Do not allow material to reach groundwater, water course or sewage system, even in small quantities. Danger to drinking water if even small quantities leak into the ground. Poisonous to fish and plankton in water bodies. May cause long lasting harmful effects to aquatic life. Avoid transfer to the environment. Very toxic to aquatic organisms.

Chemical Fate Information: ND

---

### **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: Waste Code: D011

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

---

### **Section 14: Transportation Information**

US DOT Information: Proper shipping name: Environmentally hazardous substances, n.o.s. (Silver)

Hazard Class: 9

Packaging group: III

UN Number: UN3077

IATA: Proper shipping name: Environmentally hazardous substances, n.o.s. (Silver)

Hazard Class: 9

Packaging group: III

UN Number: UN3077

IMO: Proper shipping name: Environmentally hazardous substances, n.o.s. (Silver)

Hazard Class: 9

Packaging group: III

UN Number: UN3077

Marine Pollutant: No

Canadian TDG: Environmentally hazardous substances, n.o.s. (Silver)

---

### **Section 15: Regulatory Information**

#### **United States Federal Regulations**

SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: None

SARA Title III (Section 313): Silver 7440-22-4

RCRA: Waste Code: D011

TSCA: Listed.

CERCLA: RQ (Reportable Quantity): 1000 lbs (454 kg)

The RQ for these hazardous substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (0.004 inches).

#### **State Regulations**

California Proposition 65: Not listed.

#### **International Regulations**

Canada WHMIS: ND

Europe EINECS Numbers: See section 3

---

### **Section 16: Other Information**

Label Information: None/not required.

European Risk and Safety Phrases: ND

European symbols needed: ND

Canadian WHMIS Symbols: ND

#### **Abbreviations used in this document**

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

---

**Disclaimer**

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

SDS Form 0013F1V4