



### Material Safety Data Sheet

**Product No. 23-10, 23-2, 23-50, 60001, 82, 91114, 91214, 91523, 91533, 91583, 9553, 9566, Platinum Products, Apertures, Aperture Flammers, Boats, Evaporation Materials, Targets, Wire**  
**Issue Date (10-24-11)**  
**Review Date (06-26-12)**

#### Section 1: Product and Company Identification

**Product Name: Platinum Products, Apertures, Aperture Flammers, Boats, evaporation Materials, Targets, Wire**

Synonym: None

#### Company Name

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

**Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)**

**International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)**

**Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.**

#### Section 2: 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</b>	<b>IARC</b>	<b>OSHA regulated</b>
Platinum (7440-06-4)	~100	1*	1*	No	No	No

\*Platinum Powder.

#### Section 3: Hazard Identification

##### Emergency overview

Appearance: Bright to Silver gray, lustrous malleable and ductile solid material. Disc, sheets, wire, pellets and powder

Immediate effects: Platinum Metal: Low toxicity. The alloys as sold in solid form are generally not considered 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. Platinum Powder: Flammable solid and Target Organ Effect.

Ingestion and inhalation may have irritating effects.

##### Potential health effects

Primary Routes of entry: Inhalation, Ingestion and Skin and Eye contact of dust, powders

Signs and Symptoms of Overexposure: ND

Eyes: Exposure to dust of pure metallic finely-divided form may cause irritation to the eyes.

Skin: Exposure to dust of pure metallic finely-divided form may cause skin sensitization.

Ingestion: Ingestion may have irritating effects.

Inhalation: Inhalation of dust or finely-divided form may have irritating effects.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None

See Toxicological Information (Section 11)

**Potential environmental effects**

See Ecological Information (Section 12)

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**Section 4: First Aid Measures**

**If accidental overexposure is suspected**

Eye(s) Contact: Flush eyes with lukewarm water for 15 minutes. If irritation persists, contact physician.

Skin Contact: Wash thoroughly with soap and water. If irritation persists, contact physician.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mask. If breathing is difficult, oxygen should be administered by qualified personnel. Contact physician.

Ingestion: Procedures normally not required. If large quantities are ingested, contact physician.

**Note to physician**

Treatment: ND

Medical Conditions generally Aggravated by Exposure: Individuals who may have had allergic reactions to metals or sensitivity, may encounter skin rash or dermatitis, if skin contact

with this product occurs. Persons with impaired pulmonary functions may incur further impairment if dust or fumes are inhaled.

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**Section 5: Fire Fighting Measures**

Flash Point: Non-flammable as a solid. Platinum metal powder: NA

Flammable Limits: NA

Auto-ignition point: NA

Fire Extinguishing Media: Platinum metal : This material is non-combustible. Use appropriate extinguishing agent for surrounding fires. Do not use water to extinguish fires around operations involving molten metal, due to the potential for steam explosion.

Special Fire Fighting Procedures: Self-contained breathing apparatus should be worn when fighting metal dust fires. High levels of dust or fine particles in the air may ignite or explode.

Unusual Fire and Explosion Hazards: Dust, powder and fumes are flammable or explosive when exposed to heat, to flame or by chemical reaction with oxidizing agents.

Hazardous combustion products: ND

DOT Class: Platinum metal powder: Flammable solid.

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**Section 6: Accidental Release Measures**

Steps to be Taken in Case Material is Released or Spilled: In solid form this material poses no special clean-up problems. Use normal clean up procedures; wet sweeping or HEPA vacuum, for clean up of dust or powder. Do not use compressed air for cleaning.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

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### **Section 7: Handling and Storage**

Precautions to be taken in Handling and Storage: Do not create dust. In solid form this material poses no special problems. Store metal in a dry area. Do not store adjacent to acids.

Storage temperature: NA

Storage Pressure: NA

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### **Section 8: Exposure Controls / Personal Protection**

#### **Engineering Controls**

Ventilation required: Use mechanical local exhaust ventilation adequate to maintain airborne concentrations of all components and their decomposition products to within their respective OSHA PELs.

#### **Personal Protection Equipment**

Respiratory protection: Not normally required. Use an appropriate NIOSH approved respirator if airborne dust concentration exceed the OSHA, PEL or ACGIH, TLV.

Protective gloves: Wear protective gloves.

Skin protection: Wear protective clothing adequate to prevent contact.

Eye protection: Wear eye protection (safety glasses or dust proof goggles) to prevent contact with dust.

Additional clothing and/or equipment: Eyewash station.

#### **Exposure Guidelines**

See Composition/Information on Ingredients (Section2)

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### **Section 9 Physical and Chemical Properties**

Appearance and Physical State: Bright to silver gray, lustrous malleable and ductile solid material, disc, sheets, wire, pellets and powder.

Odor (threshold): None

Specific Gravity (H<sub>2</sub>O=1): 21.45

Vapor Pressure (mm Hg): NA

Vapor Density (air=1): NA

Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA

Boiling Point: 3827 °C (6921 °F)

Freezing point / melting point: 1772 °C (3222 °F)

pH: NA

Solubility in Water: Insoluble.

Atomic Weight: 195.08

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### **Section 10: Stability and Reactivity**

Stability: Stable.

Conditions to Avoid: Incompatible materials. Avoid conditions which create dust or fumes.

Materials to Avoid (Incompatibility): Incompatible with acetone, nitrosyl chloride, arsenic, dioxygen difluoride, ethanol, hydrazine, hydrogen, hydrogen peroxide, lithium, ozonides, peroxymonosulfuric acid, phosphorous, selenium, tellurium, acetylene, aluminum. Aqua regia, molten alkali cyanides. Attacked by halogens, by fusion with caustic alkalis, alkali nitrates, alkali peroxides, by arsenates and phosphates in the presence of reducing agents. Strong oxidizers, alcohols and organic materials.  
Hazardous Decomposition Products: Chloroplatinic acid.  
Hazardous Polymerization: Will not occur.

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### **Section 11: Toxicological Information**

Results of component toxicity test performed: There is no information on the toxicity of this metal. Under normal use of the solid form of this material there are few health hazards. Welding, cutting grinding or any process creating dust, fume or oxide may cause hazardous levels of certain elements

Human experience: ND

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

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### **Section 12: Ecological Information**

Ecological Information: In solid form this material poses no special environmental problems. Metal powder or dust in may have significant impact on air and water quality.

Chemical Fate Information: ND

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### **Section 13 Disposal Considerations**

RCRA 40 CFR 261 Classification: Recycle platinum products.

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

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

**Solid Platinum forms as pellets, sheets, targets wire are not regulated.**

**Platinum metal powder is regulated.**

US DOT Information: Proper shipping name: Metal, Powder, Flammable, n.o.s.

(Platinum Powder)

Hazard Class: 4.1

Packaging group: III

UN Number: UN3089

IATA: Proper shipping name: Metal, Powder, Flammable, n.o.s. (Platinum Powder)

Hazard Class: 4.1

Packing group: III

UN Number: UN3089

IMO: Proper shipping name: Metal, Powder, Flammable, n.o.s. (Platinum Powder)

Hazard Class: 4.1

UN Number: UN3089

Packing group: III

Marine Pollutant: No

Canadian TDG: Proper shipping name: Metal, Powder, Flammable, n.o.s. (Platinum Powder)

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

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

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

SARA: Section 302: No

SARA Title III: Section 311/312 Powders: Fire Hazard, Chronic Health Hazard. Section 313: None

RCRA: No

TSCA: Platinum metal powder is listed TSCA inventory 8(b).

CERCLA: None listed.

#### **State Regulations**

California Proposition 65: No

#### **International Regulations**

Canada WHMIS: CLASS B-4: Flammable solid.

Europe EINECS Numbers: 231-116-1

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

Label Information: ND

European Risk and Safety Phrases: Platinum metal powders: R11- Highly flammable.

R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek

medical advice immediately.

European symbols needed: ND

Canadian WHMIS Symbols: ND

HMIS® Hazard Rating: Platinum Metal Powder, Health: **2**; Flammability: **3**; Physical: **3**; Chronic Health: \*

HMIS® Hazard Rating: Platinum Metal, Health: **1**; Flammability: **0**; Physical: **0**

NFPA Hazard Rating: Platinum Metal Powder, Health: **2**; Fire: **3**; Reactivity: **3**

NFPA Hazard Rating: Platinum Metal, Health: **1**; Fire: **0**; Reactivity: **0**

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

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

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

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### **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.

MSDS Form 0013F1 V2