

Safety Data Sheet

Product No. 91120, 91576, 9571 Iridium Targets, Iridium Products Issue Date (10-02-10) Review Date (08-31-17)

Section 1: Product and Company Identification Product Name: Iridium Products

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 GHS Pictograms:



Signal Word DANGER

GHS Classification: Flammable solids (Category 1). Powders only. Eye irritation (Category 2A) GHS Label elements, including precautionary statements Hazard statement(s): H228 Flammable solid. Powders only. H319 Causes serious eye irritation. Precautionary statement(s) P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. HMIS Classification: Health hazard: 2 Flammability: 0 Physical hazards: 3 NFPA Rating: Health hazard: 2 Fire: 0 Reactivity Hazard: 3 (0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme) **Emergency overview** Appearance: Silver white foil disc, wire. Powder Immediate effects: Powders: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. **Potential health effects** Primary Routes of entry: Powders, Inhalation, Ingestion Signs and Symptoms of Overexposure: ND Eyes: Powders: Acute; May cause abrasive irritation, itching and watering. Chronic; NA Skin: Powders: Acute; May cause abrasive irritation, redness and itching. Chronic; NA Ingestion: Acute; NA Chronic; NA Inhalation: Powders: Acute; May cause irritation (dry throat) Chronic; NA Chronic Exposure: ND Chemical Listed As Carcinogen Or Potential Carcinogen: None

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Iridium (7439-88-5)	100	NE	NE	No	No	no

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Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes. Skin Contact: Remove contaminated clothing; brush material off skin. Wash affected area with soap or mild detergent.

Inhalation: Remove from exposed area to fresh air immediately; keep warm and quiet, give oxygen if breathing is difficult.

Ingestion: ND

Note to physician

Treatment: ND

Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: ND Flammable Limits: ND Auto-ignition point: ND Fire Extinguishing Media: Class D or other extinguishing agent. Do not use water. Special Fire Fighting Procedures: ND Unusual Fire and Explosion Hazards: Powders: May ignite spontaneously in air. Violent reaction or ignition on contact with interhalogens. Iridium is attacked by F₂ and Cl₂ at red heat; by potassium sulfate or a mixture of potassium hydroxide and nitrate, on fusion. Lead, zinc and tin. Does not tarnish in air, on heating strongly, a slightly volatile oxide is formed. Hazardous combustion products: None. DOT Class: None

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Powders: Wear appropriate respiratory and protective equipment. Isolate the area where the spill occurred and provide ventilation. Vacuum up the spill using a high efficiently particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

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: Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air. Storage temperature: Store in a cool dry place Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: To maintain concentration at low levels. Mechanical ventilation Recommended. Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels.

Personal Protection Equipment

Respiratory protection: Powders: approved dust respirator. Protective gloves: Powders: Rubber gloves Skin protection: Powders: Wear protective gear suitable to prevent contact. Eye protection: Powders: Safety glasses or goggles. Additional clothing and/or equipment: ND **Exposure Guidelines** See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Silver white foil disc, powder, wire Odor (threshold): None Specific Gravity (H₂O=1): 22.4 g/cc Vapor Pressure (mm Hg): NA Vapor Density (air=1): NA Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA Boiling Point: 4500 °C @760.00mm Hg Freezing point / melting point: 2443 °C pH: NA Solubility in Water: Insoluble. Molecular Weight: 192.20

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: Powders: Ignition sources, dust generation
Materials to Avoid (Incompatibility): Interhalogens, fluorine, chlorine, potassium sulfate, potassium hydroxide, sodium peroxides and potassium nitrate. Zinc, lead, Tin.
Hazardous Decomposition Products: None.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed: ND Human experience: ND 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: ND Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND. Recycle metal.

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

Section 14: Transportation Information

Foils and Disc are not regulated.

Powders Only: <u>US DOT Information</u>: Proper shipping name: Metal Powder, Flammable N.O.S. (Iridium powder) Hazard Class: 4.1 Packaging group: III UN Number: 3089 <u>IATA</u>: Proper shipping name: Metal Powder, Flammable N.O.S. (Iridium powder) Hazard Class: 4.1 Packing group: III UN Number: UN3089 Marine Pollutant: No Canadian TDG: Metal Powder, Flammable N.O.S. (Iridium powder)

Section 15: Regulatory Information

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200. SARA Title III: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De minimis) reporting levels established by SARA Title III, Section 313 SARA 311/312 Hazards Fire Hazard, Acute, Health Hazard RCRA: ND TSCA: Listed on the TSCA Inventory CERCLA: ND **State Regulations** California Proposition 65: None **International Regulations** Canada WHMIS: ND Europe EINECS Numbers: 231-095-9

Section 16: Other Information

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.

MSDS Form 0013F1 V2