

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Palladium (II) 2,4-Pentaedionate

Product Code: 5026

Company: Colonial Metals, Inc.
 Building 20
 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
 Telephone Number: 410-398-7200
 FAX Number: 410-398-2918
 E-Mail : info@colonialmetals.com
 Web Site: www.colonialmetals.com



www.colonialmetals.com

Emergency Response: Supplier Emergency Contacts & Phone Number
 Chemtrec: 800-424-9300
 World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

GHS07

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Hazard Pictograms:



Signal Word: Warning

Hazard Category: Serious eye damage/eye irritation Cat 3
 Skin corrosion/irritation Cat 3
 Acute tox, oral Cat 5
 Acute tox, inh. Cat 5
 Reproductive tox Cat 2

Hazard Statements: H320: Causes eye irritation
 H316: Causes mild skin irritation
 H303: May be harmful if swallowed
 H333: May be harmful if inhaled
 H361: Suspected of damaging fertility or the unborn child

Precautionary Statements: P202: Do not handle until all safety precautions have been read and understood
 P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
 P264: Wash thoroughly after handling
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P308+313: IF exposed or concerned: Get medical advice/attention
 P402+404: Store in a dry place. Store in a closed container
 P501: Dispose of contents/container in accordance with local/national/international rules.

Hazards not otherwise classified: Not applicable, none known. The toxicological properties of this material have not been fully investigated.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Palladium (II) 2,4-Pentanedionate	Irritant	14024-61-4	99 - 100
Chemical Family: Organometallic Compound in organic solvent Chemical Formula: Pd(C ₅ H ₇ O ₂) ₂			

Section 4: First Aid Measures

General Info: Ensure proper ventilation.

Notable Exposure symptoms: Irritation to skin, eyes and areas of contact.

If ingested: Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing.
If swallowed, do not induce vomiting unless directed to do so by medical personnel.

If inhaled: Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention if irritation develops or persists.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or persists.

Additional Info: Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

Section 5: Fire Fighting Measures

General Info: Vapors may ignite and explode. Flammable liquid

Extinguishing For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide.

Method / Equipment: For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Hazardous Decomposition Info: Hazardous decomposition products formed under fire conditions: Carbon oxides. Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Containment Equipment and Procedures: Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust. Collect material and dispose. Contain and/or absorb spill with inert material (e.g. sand, vermiculite).

Small Spills: Wash and collect to waste receptacles.

Cleanup Procedures: Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

Section 7: Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing dust/vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

Other Precautions: 0.01 ppm high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm powdered air purifying respirator with high efficiency filter/type C supplied air respirator operated in pressure demand mode. Store in a sealed container, plastic or plastic liner, in a cool, well ventilated, dry area away from volatile acids.

Recommendations for Storage: Store in cool, dry area in a tightly closed product container away from sources of ignition or flame. Do not store directly on ground.

Incompatibilities: Strong oxidizing agents

Section 8: Exposure Control / Personal Protection

General / Local Exhaust: Required in handling area**Engineering Controls:** **Mechanical:** Desirable to insure concentration of material below TLV/TWA levels**Other:** Closed Ventilation system – (Laboratory Fume Hood)**Work Clothing:** Protective work clothing which covers skin and prevents exposures.**Eye/face protection:** Wear safety glasses with side shields or goggles or face shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).**Skin Protection:** Wear chemical resistant gloves, impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.**Respiratory Protection:** Utilize organic vapor respirator if airborne levels are not maintained or if ventilation is inadequate.

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Additional Information: Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed skin after using the product.**Section 9: Physical and Chemical Properties**

State: Solid Powder	Melting Point: 200 - 251 °C (392 - 484 °F)	Freezing Point: N/A
Color: Yellow	Boiling Point/Range: 300 °C (572 °F) at 0.1 hPa (0.1 mmHg)	pH: N/A
Molecular Wt.: N/A	Odor: None	Water Solubility: Insoluble
Evaporation rate: N/A	Flash Point: N/A	Part. Coeff (n-octanol/water): N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Vapor Pressure: 0.1 hPa (0.1 mmHg) at 160 °C (320 °F)
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A

Section 10: Stability and Reactivity

General: Conditions To Avoid (Stability):

This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources.

Incompatible materials: Strong oxidizing agents**Decomposition products:** Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available
Thermal decomposition: 300 °C**Section 11: Toxicological Information**

General Information: No data available**Toxicological Information (product):** Product has not been tested. Prolonged inhalation may be harmful to human health. Irritating in case of skin or eye contact. May be harmful if swallowed or in contact with skin.**Likely Routes of Exposure:** Eye Contact
Skin Contact
Inhalation
Ingestion - possible, but considered unlikely.

Toxicological Information (contained substances)

Carcinogenicity or mutagenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Sensitization: Product is not expected to be a sensitizer.

Other Notes: Acute Studies

Acute toxicity

Oral LD50

LD50 Oral - rat - > 2,000 mg/kg

Inhalation LC50

no data available

Dermal LD50

no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

Skin - rabbit - No skin irritation

Serious eye damage/eye irritation

Eyes - rabbit - Moderate eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Potential health effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Signs and Symptoms of Exposure

May liberate 2,4-pentanedione upon decomposition. 2,4-Pentanedione has the following toxicological hazards:

toxic, irritant, neurological hazard, teratogen, possible mutagen, target organ - thymus. In humans, 2,4-pentanedione is reported to cause contact dermatitis and contact urticaria., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

no data available

Additional Information

RTECS: Not available

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

Section 12: Ecological Information

General information: Product not tested.

Aquatic toxicity: No specific data available. Do not allow large quantities of product to reach water, ground water, water courses or sewer systems.

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

Container disposal: Treat empty containers with extra care. Consult waste contractor.

Other considerations: NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate

Section 14: Transport Information

DOT: Not dangerous goods, None, considered non-hazardous for transport

IMO/IMDG: Not dangerous goods, Non-Hazardous

IATA: Not dangerous goods, See regulation for information

OTHER: Inquire for further transport information.

Comments: None

Section 15: Regulatory Information

TSCA: All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SARA 313 This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372

SARA 311/312 Acute Health Hazard, Chronic Health Hazard
Hazards

Canadian DSL: : All ingredients of this product comply with New Substances Notification requirements of the Canadian Environmental Protection Act (CEPA).

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Palladium(II) 2,4-pentanedionate CAS-No. 14024-61-4 Revision Date

New Jersey Right To Know Components

Palladium(II) 2,4-pentanedionate CAS-No. 14024-61-4 Revision Date

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

NFPA Rating

Health: 2
Fire: 0
Reactivity: 0
Other: FL

HMIS Rating

Health: 2
Fire: 0
Reactivity: 0
Personal
Protection: C

Disclaimer: In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

Colonial Metals, Inc.

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Version Date: 6/15/2015