

Safety Data Sheet
29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Palladium Powder, 99.95%

Product Code: 5000

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
Chemtec: 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:

Danger

Hazard Category:

Skin corrosion/irritation Cat 2
Serious eye damage/eye irritation Cat 2
Acute tox, oral Cat 5
Specific target organ tox, single exp. Cat 3 (resp irrit)
Specific target organ tox, repeat exp. Cat 2

Hazard Statements:

H315: Causes skin irritation
H319: Causes serious eye irritation
H303: May be harmful if swallowed
H335: May cause respiratory irritation
H373: May cause damage to organs through prolonged or repeated exposure

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
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove
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:

Warning! May cause allergic skin reaction. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Inhalation hazard as a fine dust or fume.
Target Organs: Liver, lungs.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Palladium(II)	This product is considered non-hazardous when evaluated by criteria established in the OSHA Hazard Communication Standard (29 CFR 1910.1200).	7440-05-3	99-100
Chemical Family: Platinum Group Metals Chemical Formula: Pd Synonyms: Palladium Metal, Palladium Powder, Palladium Flake			

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 immediately.

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: When metal powder or flake from a solvent suspension is allowed to dry, the residual organic may self-ignite. If metal suspension residue self-ignites, use CO₂ or dry powder extinguisher. Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Extinguishing Method / Equipment: Use water spray, foam, dry chemical, carbon dioxide (CO₂), chemical foam, or medium for primary source.

Hazardous Decomposition Info: 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: Very fine particles can cause a fire or explosion. Sweep or soak up and place in sealed container; Taking care to avoid dusting. Person protected with full face shield and NIOSH approved respirator and cartridge for dust. Ventilate area and wash spill site after pick-up is complete.

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. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

Recommendations for Storage: Store in cool, dry area in a tightly closed product container away from sources of ignition or flame.

Incompatibilities: Strong acids, halogens, bases. Palladium undergoes a violent reaction with arsenic, methanol, ethanol, alcohols

Section 8: Exposure Control / Personal Protection

General / Engineering Use with adequate local and general exhaust ventilation.

Controls:

Work Clothing: Protective work clothing which covers skin and prevents exposures.

Eye/face protection: Wear safety glasses with side shields or goggles or face shield.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: NIOSH approved chemical cartridge respirator for particulates and dust, if there is a potential for airborne exposure to exceed established threshold value, or self-contained breathing apparatus with full face shield.

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: 1555 °C	Freezing Point: N/A
Color: Gray to Black	Boiling Point/Range: 3167 °C	pH: N/A
Molecular Wt. 106.4	Odor: Slight Process Odor	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 Density: 12.02 g/cm ³
VOC Content (lbs/gal): N/A	Specific Gravity: 12.02	Autoignition Temp: N/A

Section 10: Stability and Reactivity

General: 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: Aluminum, arsenic, ozonides, sodium tetrahydroborates, carbon, formic acid, sulfur, hydrogen + hydrogen peroxide.

Decomposition products: Irritating and toxic fumes and gases, hydrogen gas.

Section 11: Toxicological Information

General Information: To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

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 RTECS#:

mutagenicity: CAS# 7440-05-3: RT3480500; RT3593400

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 7440-05-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65

Sensitization: Product is not expected to be a sensitizer.

Other Notes: Not applicable.

Section 12: Ecological Information

General information: Product not tested.

Aquatic toxicity: No specific data available.

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

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: Non-Hazardous

IMO/IMDG: Non-Hazardous

IATA: See regulation for information

OTHER: Inquire for further transport information.

Comments: Non-Hazardous for shipping

Section 15: Regulatory Information

TSCA: TSCA 8(b) inventory: Palladium

Canadian DSL: WGK (Water Danger/Protection)

CAS# 7440-05-3: 0

Canada - DSL/NDSL

CAS# 7440-05-3 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

European Union (EU) Hazard Symbols:

Regulatory Not available.

Information: Risk Phrases:

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

Section 16: Other Information

NFPA Rating

Health: 1

Fire: 1

Reactivity: 0

HMIS Rating

Health: 1

Fire: 1

Reactivity: 0

Personal

Protection: C

Precautionary Label

Irritant

Disclaimer: In compliance with the OSHA Hazard communication Standard, 29 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 believed to be correct; however, you (the customer), should perform 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.

SDS Author: John Kerchner

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