

Safety Data Sheet 29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Palladium (II) Oxide Hydrate

Product Code: 5107

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: Warning

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

Hazard Statements: H316: Causes mild skin irritation
H320: Causes eye irritation
H303: May be harmful if swallowed
H335: May cause respiratory irritation

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: To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated. Avoid temperatures above 1000C. Product incompatible with alkalis, hydrogen bromide, bromine, and hydrobromic acid.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Palladium (II) Oxide Hydrate	This product is considered non-hazardous when evaluated by criteria established in the OSHA Hazard Communication Standard (29 CFR 1910.1200).	12135-22-7	99-100
Chemical Family: Platinum Group Metals Chemical Formula: OPd • xH ₂ O	Not a dangerous substance according to GHS		

Section 4: First Aid Measures

General Info: Ensure proper ventilation.

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

symptoms:

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: **Flash Point:** NA °C

Autoignition Point :N/A

Flammability Class: N/A

Fire And Explosion Hazards

Emits toxic fumes under fire conditions.

Extinguishing In case of fire, use water fog, dry chemical, CO₂, or "alcohol" foam.

Method / Equipment:

Hazardous Constituents associated with burning / combustion are to be considered toxic. Firefighters should

Decomposition Info: 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: Contain actively spilling material if safe and easy to do so, avoid generating dust. Collect material and dispose. Sweep 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 Do not handle until all safety precautions have been read and understood. Keep containers tightly

Precautions: 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 Controls: Use with adequate local and general exhaust ventilation.

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: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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: N/A	Freezing Point: N/A
Color: Yellow to Brown	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 140.4	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 Pressure: N/A
VOC Content (lbs/gal): N/A	Viscosity: N/A	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: Alkalies, hydrogen bromide, bromine, and hydrobromic acid.

Decomposition products: Not Known

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

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. 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: 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: Not Dangerous Goods - Non-Hazardous

IMO/IMDG: Not Dangerous Goods - Non-Hazardous

IATA: See regulation for information

OTHER: Inquire for further transport information.

Comments: Non-Hazardous for shipping

Section 15: Regulatory Information

SARA Hazard SARA 302 Components

Classes: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

No SARA Hazards

SARA Section 313 Notification

SARA 313 Components

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.

State Regulations: Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

Palladium monoxide hydrate CAS-No. 64109-12-2

New Jersey Right To Know Components

Palladium monoxide hydrate CAS-No. 64109-12-2

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.

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

European Union (EU) R36/37/38 - Irritating to eyes, respiratory system and skin

**Regulatory
Information:**

Section 16: Other Information

NFPA Rating

Health: 0

Fire: 0

Reactivity: 0

HMIS Rating

Health: 0

Fire: 0

Reactivity: 0

Personal

Protection: C

Precautionary Label

Irritant - Target Organ Effect, Resp. Irritation

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 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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