

MATERIAL SAFETY DATA SHEET



Palladium (II) Nitrate Hydrate

Ru
Rh
Pd
Ag
Re
Os
Ir
Pt
Au

<p>NFPA</p>	<p>HMIS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00b0f0; color: white;">HEALTH</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: #ff0000; color: white;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #ffff00;">REACTIVITY</td> <td style="text-align: center;">2</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">J</td> </tr> </table>	HEALTH	3	FLAMMABILITY	0	REACTIVITY	2	PERSONAL PROTECTION	J
HEALTH	3								
FLAMMABILITY	0								
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PERSONAL PROTECTION	J								

1. Product And Company Identification

<p>Supplier Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States</p> <p>Company Contact: Wayne Sher Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: wsher@colonialmetals.com Web Site: colonialmetals.com</p>	<p>Manufacturer Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States</p> <p>Company Contact: Wayne Sher Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: wsher@colonialmetals.com Web Site: colonialmetals.com</p>
<p>Supplier Emergency Contacts & Phone Number Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887</p>	<p>Manufacturer Emergency Contacts & Phone Number Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887</p>

Issue Date: 05/17/2011

Product Name: Palladium (II) Nitrate Hydrate
Chemical Name: Palladium (II) Nitrate/Palladous Nitrate
CAS Number: 10102-05-3
Chemical Family: Platinum Group Metal Salts
Chemical Formula: Pd(NO₃)₂·2H₂O
MSDS Number: 5004
Product Code: 5004

Synonyms
 Palladium Dinitrate, Palladium Nitrate

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Palladium (II) Nitrate	10102-05-3	

EMERGENCY OVERVIEW

Oxidizing. Irritant. Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.

Target organ(s): Blood. Central nervous system.

Hazards Identification (Pictograms)**3. Hazards Identification****Primary Routes(s) Of Entry**

Eye Contact
Ingestion - possible, but considered unlikely.
Inhalation
Skin Contact

Eye Hazards

Can cause eye Irritation.

Skin Hazards

Can cause skin irritation.

Ingestion Hazards

Harmful if swallowed. Does not cause serious toxic manifestations

Inhalation Hazards

Causes respiratory tract irritation.

Subchronic (Target Organ Effects)

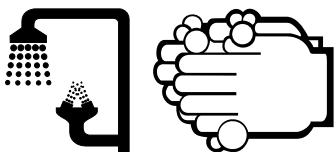
Blood and Central Nervous Systems.

Conditions Aggravated By Exposure

May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

Conditions Aggravated By Overexposure

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

First Aid (Pictograms)**4. First Aid Measures****Eye**

Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician.

Skin

Flush area for 15 minutes with water and wash with soap and water. If discomfort occurs or persists, contact a physician. Remove contaminated clothing and shoes and wash before reuse.

4. First Aid Measures - Continued

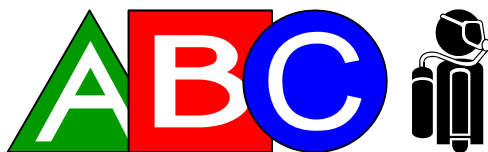
Ingestion

Not expected to be a problem in industry. However if swallowed and discomfort occurs, contact a physician.

Inhalation

Remove to fresh air immediately. If discomfort occurs or persists, contact a physician.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point Method: NA

Flammability Class: NA

Fire And Explosion Hazards

Use proper safety equipment. Can decompose to emit toxic nitrous oxide (NOx) gases.

Extinguishing Media

Use water spray, foam, dry chemical, carbon dioxide or medium for primary source.

Fire Fighting Instructions

Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Contact with other material may cause fire. Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)

Material: Irritant.

6. Accidental Release Measures

Avoid generating dust.

Clean up spill immediately.

Sweep up and remove immediately.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions

Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant gloves. Wash hands thoroughly after handling.

7. Handling And Storage - Continued

Handling Precautions

Avoid breathing dust or vapor. Avoid contact with eyes. Avoid contact with skin and clothing. Keep away from combustible material, heat, sparks, and open flame.

Storage Precautions

Do not store directly on ground. Keep away from heat, sparks, flame, and other sources of ignition.... Store in a dry place.

Work/Hygienic Practices

Use good personal hygiene. Wash thoroughly after handling. Wash thoroughly with soap and water after handling.

Other Precautions

0.01 mg/m² high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 mg/m² same as above with full face piece; 1 mg/m³ 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.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls

Ventilation: Local Exhaust: Required in handling area
 Mechanical: Desirable to insure concentration of material below TLV/TWA levels
 Other: NA

Eye/Face Protection

ANSI approved safety glasses/goggles

Skin Protection

Rubber/Neoprene (use compatible chemical-resistant gloves).

Respiratory Protection

Chemical cartridge respirator for dust/mist/fume/radionuclide, or self-contained breathing apparatus with full face shield.

Other/General Protection

Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

9. Physical And Chemical Properties

Appearance

Dark Brown/Black Crystals

Odor

Nitrous oxide odor

Palladium (II) Nitrate Hydrate**Ru Rh Pd Ag Re Os Ir Pt Au****9. Physical And Chemical Properties - Continued**

Chemical Type: Mixture
Physical State: Solid
Melting Point: Decomposes °C
Boiling Point: NA °C
Specific Gravity: NE
Molecular Weight: 266.46
Vapor Pressure: NA
Vapor Density: NA
pH Factor: NA
Solubility: Soluble w/ Turbidity
Evaporation Rate: NA

10. Stability And Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Conditions To Avoid (Stability)
Elevated temperature, air, light, and moisture sensitive.
Incompatible Materials
Mixing with reducing agents
Hazardous Decomposition Products
Nitrous Oxide (NOx) gases

11. Toxicological Information

No Data Available...

12. Ecological Information

No Data Available...

13. Disposal Considerations

Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

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

14. Transport Information**Proper Shipping Name**

Nitrates, inorganic, n.o.s.

Hazard Class

5.1

Secondary Hazard Class

NA

DOT Identification Number

1477

Palladium (II) Nitrate Hydrate**Ru Rh Pd Ag Re Os Ir Pt Au****14. Transport Information - Continued****DOT Shipping Label**

Nitrates, inorganic, n.o.s.

Freight Class

See 49 CFR

Packaging Exceptions

See 49 CFR

Packaging Requirements

PGII

Additional Shipping Paper Description

IATA: Same as DOT regulation 49 CFR. Consult IATA regulation for further information.

DOT (Pictograms)**TDG - Canada (Pictograms)****15. Regulatory Information****U.S. Regulatory Information**

This chemical is TSCA listed.

SARA Section 313 Notification

This product is subject to SARA Section 313 reporting requirements - Nitrate Compounds (Water Dissociable).

Canadian Regulatory Information

This information and product has been classified in accordance with the hazard criteria of CPR, and the MSDS contains all the information required by the CPR.

European Union (EU) Regulatory Information

Sign of Danger: O, Xi

Indication of Danger: Oxidizing, and Irritant

R: 8, 36/37/38

Risk Phrase: Contact with combustible material may cause fire. Irritating to eyes, respiratory system, and skin.

S: 36,17, 26

Safety Phrase: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Keep away from combustible material, Wear suitable protective clothing.

Palladium (II) Nitrate Hydrate**Ru Rh Pd Ag Re Os Ir Pt Au****15. Regulatory Information - Continued****Other International Regulations**

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Oxidizing. Irritant.

Risk Statements: Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.

Safety Statements: Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

US Statements: Target organ(s): Blood. Central nervous system.

WHMIS - Canada (Pictograms)**DSCL - Europe (Pictograms)****16. Other Information****NFPA Rating**

Health: 3

Fire: 0

Reactivity: 2

Irritant: OX

HMIS Rating

Health: 3

Fire: 0

Reactivity: 2

Personal Protection: J

Precautionary Label

Oxidizing and Irritant.

Revision/Preparer Information

MSDS Preparer: Wayne Sher

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supersedes A Previous MSDS Dated: 03/15/1998

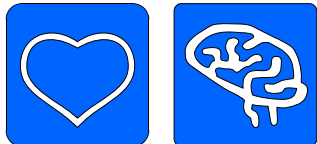
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Ru Rh Pd Ag Re Os Ir Pt Au

Other (Pictograms)



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.

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