



# MATERIAL SAFETY DATA SHEET

## Palladium (II) Oxide

<p><b>NFPA</b></p>	<p><b>HMIS</b></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;">1</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;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">J</td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	1								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	J								

### 1. Product And Company Identification

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

**Issue Date:** 03/29/2005

**Product Name:** Palladium (II) Oxide  
**Chemical Name:** Palladium Oxide  
**CAS Number:** 1314-08-5  
**Chemical Family:** Metal Oxide  
**Chemical Formula:** PdO  
**MSDS Number:** 5005  
**Product Code:** 5005

**Synonyms**  
Palladium monoxide

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Palladium Oxide	1314-08-5	100

### EMERGENCY OVERVIEW

The dust may irritate the eyes, skin and respiratory system.



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## Palladium (II) Oxide

### 3. Hazards Identification

#### Primary Routes(s) Of Entry

**Eyes:** Likely  
**Inhalation:** Likely

#### Eye Hazards

Causes eye irritation.

#### Skin Hazards

May cause skin irritation.

#### Ingestion Hazards

None expected, except from discomfort. Does not cause serious toxic manifestations.

#### Inhalation Hazards

Causes respiratory tract irritation. May cause nose, throat, and lung irritation.

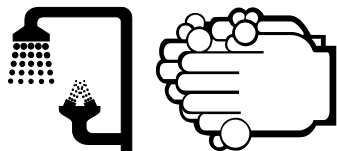
#### Conditions Aggravated By Exposure

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.

#### Ingestion

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

#### Inhalation

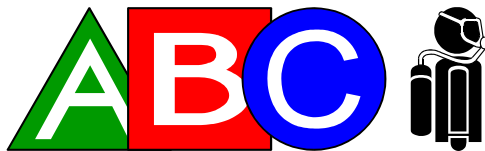
Remove to fresh air immediately. If discomfort occurs or persists, contact a physician.



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## Palladium (II) Oxide

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

**Flash Point Method:** NA

**Flammability Class:** NA

#### Fire And Explosion Hazards

Use proper safety equipment to fight fire

#### Extinguishing Media

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

#### Fire Fighting Instructions

If metal suspension residue self ignites, use CO2 or dry powder extinguisher. Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

### 6. Accidental Release Measures

Sweep up (avoid dusting) or soak up with a wet paper towel or rag and place in a sealed container. Person protected with full face shield and proper respirator for dust. Ventilate area and wash spill site after pick up is complete.

### 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.

#### Handling Precautions

Avoid breathing dust or vapor. Avoid creating dust. Do not get in eyes.

#### Storage Precautions

Do not store directly on ground. 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

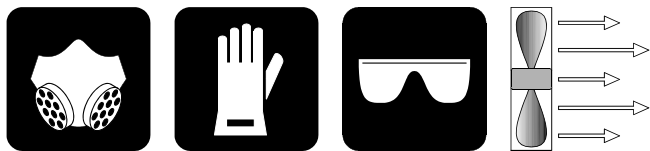
0.01 mg/m<sup>2</sup> high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 mg/m<sup>2</sup> same as above with full face piece; 1 mg/m<sup>3</sup> powdered air purifying respirator with high efficiency filter/type C supplied air respirator operated in pressure demand mode. Store in a sealed container, plastic or plastic liner, in a cool, well ventilated, dry area away from volatile acids.



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## Palladium (II) Oxide

### 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:** Desirable

#### 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

Gray to black powder

#### Odor

Slight process odor

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** Decomposes °C

**Boiling Point:** NA °C

**Specific Gravity:** 8.7

**Molecular Weight:** 122.4

**Vapor Pressure:** NA

**Vapor Density:** NA

**pH Factor:** NA

**Solubility:** Insoluble

**Evaporation Rate:** NA

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur



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<p><b>10. Stability And Reactivity - Continued</b></p> <p><b><u>Conditions To Avoid (Stability)</u></b>          Temperature above 1000oC (2120oF)</p> <p><b><u>Incompatible Materials</u></b>          Alkalies, hydrogen bromide, bromine, and hydrobromic acid.</p> <p><b><u>Hazardous Decomposition Products</u></b>          None</p>
<p><b>11. Toxicological Information</b></p> <p>No Data Available...</p>
<p><b>12. Ecological Information</b></p> <p>No Data Available...</p>
<p><b>13. Disposal Considerations</b></p> <p>Place in sealed container. Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation</p> <p>NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.</p>
<p><b>14. Transport Information</b></p> <p><b><u>Proper Shipping Name</u></b>          Non-Hazardous</p> <p><b><u>Additional Shipping Paper Description</u></b>          IATA: Same as DOT 49 CFR Regulation. Consult ATA regulation for further information.</p>
<p><b>15. Regulatory Information</b></p> <p><b><u>U.S. Regulatory Information</u></b>          This product is TSCA Listed.</p> <p><b><u>Canadian Regulatory Information</u></b></p>
<p><b>16. Other Information</b></p> <p><b><u>NFPA Rating</u></b>  <b>Health:</b> 1  <b>Fire:</b> 0  <b>Reactivity:</b> 0</p> <p><b><u>HMIS Rating</u></b>  <b>Health:</b> 1  <b>Fire:</b> 0  <b>Reactivity:</b> 0  <b>Personal Protection:</b> J</p> <p><b><u>Revision/Preparer Information</u></b>  <b>MSDS Preparer:</b> Wayne Sher  <b>MSDS Preparer Phone Number:</b> 410-398-7200</p>



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## Palladium (II) Oxide

### 16. Other Information - Continued

#### Revision/Preparer Information - Continued

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

#### 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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