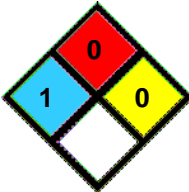


**Rhenium (IV) Oxide Dihydrate**

Ru	Rh	Pd	Ag	Re	Os	Ir	Pt	Au
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<b>NFPA</b> 	<b>HMIS</b> <table border="1"> <tr> <td style="background-color: #00B0F0;">HEALTH</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: #FF0000;">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**

<b>Supplier</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <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	<b>Manufacturer</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <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
<b>Supplier Emergency Contacts &amp; Phone Number</b> Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887	<b>Manufacturer Emergency Contacts &amp; Phone Number</b> Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887

**Issue Date:** 12/30/2010  
**Product Name:** Rhenium (IV) Oxide Dihydrate  
**Chemical Name:** Same as above  
**CAS Number:** 12036-09-8  
**Chemical Family:** Platinum group metal oxide  
**Chemical Formula:** ReO<sub>2</sub>.2H<sub>2</sub>O  
**MSDS Number:** 10006  
**Product Code:** 1000-6

**2. Composition/Information On Ingredients**

Ingredient Name	CAS Number	Percent Of Total Weight
RHENNIUM (IV) OXIDE DIHYDRATE	12036-09-8	0 - 100

**EMERGENCY OVERVIEW**

**Irritant**

**3. Hazards Identification**

**Primary Routes(s) Of Entry**

Eye	Likely
Skin	Likely
Inhalation	Likely

**3. Hazards Identification - Continued****Eye Hazards**

Causes irritation.

**Skin Hazards**

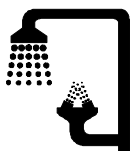
Causes irritation. If absorbed through the skin may be harmful.

**Ingestion Hazards**

Not expected to be a problem in industry, if swallowed may be harmful.

**Inhalation Hazards**

Irritating to upper respiratory tract and mucous membranes.

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

Rinse eye with copious amounts of water. If discomfort persists seek medical attention immediately.

**Skin**

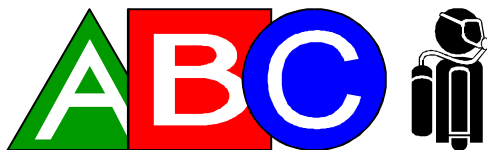
Immediately wash affected area with soap and water and rinse thoroughly. If discomfort persists seek medical attention immediately.

**Ingestion**

Seek medical attention immediately.

**Inhalation**

Get victim to fresh air immediately. If victim is not breathing provide artificial respiration. Keep victim warm. Seek medical attention immediately.

**Fire Fighting (Pictograms)****5. Fire Fighting Measures**

**Flash Point Method:** NA

**Autoignition Point:** NA °C

**Flammability Class:** non flammable

**Fire And Explosion Hazards**

No information available.

**Extinguishing Media**

Product is not flammable, choose proper extinguishing media to fight surrounding fire.

**5. Fire Fighting Measures - Continued**

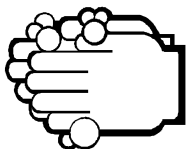
**Fire Fighting Instructions**

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

**6. Accidental Release Measures**

Wear protective clothing and ensure adequate ventilation. Pick up material mechanically and use proper disposal or reclaim methods.

**Handling & Storage (Pictograms)**



**7. Handling And Storage**

**Handling And Storage Precautions**

Keep containers tightly closed.  
Use only with adequate ventilation.  
Wash thoroughly after handling.

**Handling Precautions**

Handle under nitrogen. Wear proper personal protective equipment. Avoid inhalation.

**Storage Precautions**

Store in a tightly closed container under nitrogen in a cool dry area away from oxidizing agents.

**Work/Hygienic Practices**

Always use good personal hygiene after handling.

**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: Closed Ventilation System (Laboratory Fume Hood)

Safety shower and eyewash

**Eye/Face Protection**

ANSI approved safety glasses/goggles

**Skin Protection**

Rubber/Neoprene (use compatible chemical-resistant gloves)

**Rhenium (IV) Oxide Dihydrate****Ru Rh Pd Ag Re Os Ir Pt Au****8. Exposure Controls/Personal Protection - Continued****Respiratory Protection**

NIOSH approved chemical cartridge respiratory for particulates and dust 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**

Black powder

**Odor**

odorless

**Chemical Type:** Mixture

**Melting Point:** 1832 F 1000 C

**Vapor Density:** 11.4 g/cm<sup>3</sup> @ 20C

**Solubility:** insoluble

**10. Stability And Reactivity**

**Stability:** stable

**Hazardous Polymerization:** will not occur

**Conditions To Avoid (Stability)**

Follow handling and storage instructions and compound should remain stable.

**Incompatible Materials**

Oxidizing agents.

**Hazardous Decomposition Products**

Metal oxide fumes.

**11. Toxicological Information**

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

**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**

None

This substance is considered to be non-hazardous for shipping.

**Rhenium (IV) Oxide Dihydrate****Ru Rh Pd Ag Re Os Ir Pt Au****15. Regulatory Information****U.S. Regulatory Information**

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 Section 313 Notification**

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.

**Canadian Regulatory Information**

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

DSL: No

NDSL: Yes

**European Union (EU) Regulatory Information**

R36/37/38 - Irritating to eyes, respiratory system and skin

S3/9/49 - Keep only in the original container, in a cool, well-ventilated place

S24/25 - Avoid contact with skin and eyes

**16. Other Information****NFPA Rating**

Health: 1

Fire: 0

Reactivity: 0

**HMIS Rating**

Health: 1

Fire: 0

Reactivity: 0

Personal Protection: J

**Revision/Preparer Information**

MSDS Preparer: Wayne S. Sher

MSDS Preparer Phone Number: (410)398-7200

**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.