

**Safety Data Sheet**  
29 CFR 1910.1200

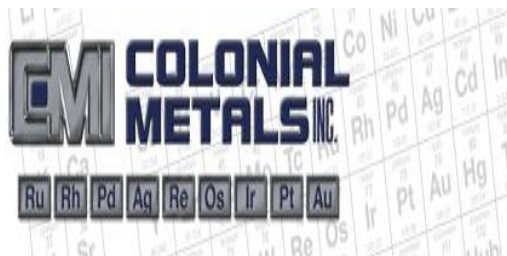
**Section 1: Company and Product Identification**

**Product Name:** Rhenium Powder

**Product Code:** 1000

**CAS #:** 7440-15-5

**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



**Emergency** Supplier Emergency Contacts & Phone Number

**Section 2: Hazards Identification**

**Hazard Pictograms:**



**Signal Word:** Danger

**Hazard Category:** Flammable Solid  
Skin corrosion/irritation Cat 3  
Acute tox, oral Cat 5  
Acute tox, inh. Cat 5

**Hazard Statements:** H228: Flammable solid  
H316: Causes mild skin irritation  
H303: May be harmful if swallowed  
H333: May be harmful if inhaled

**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  
P240: Ground/bond container and receiving equipment  
P241: Use explosion-proof electrical/ventilating/light/.../equipment  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P370+378: In case of fire: Use ... for extinction  
  
P402+404: Store in a dry place. Store in a closed container  
  
P501: Dispose of contents/container in accordance with local/national/international

**Hazards not otherwise classified:** Not applicable, none known. The toxicological properties of this material have not been fully investigated. This product is considered non-hazardous when evaluated by criteria

**Section 3: Composition / Information on Ingredients**

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Rhenium	Irritant	7440-15-5	99 - 100
<b>Product Name:</b> Rhenium Powder <b>Chemical Name:</b> Rhenium Metal <b>Chemical Family:</b> Transition Metal <b>Chemical Formula:</b> Re			

**Section 4: First Aid Measures**

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**General Info:** Ensure proper ventilation. Consult a physician. Show safety data sheet to the attending physician. Move out of dangerous area.

**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 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

**Section 5: Fire Fighting Measures**

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**General Info:** Product is not flammable

**Extinguishing** In case of fire, use water spray, dry chemical, CO<sub>2</sub>, or alcohol resistance foam.

**Method / Equipment:**

**Hazardous** Constituents associated with burning / combustion Rhenium Oxide are to be considered harmful if

**Decomposition Info:** inhaled. Firefighters should wear self-contained breathing apparatus and full protective gear.

In case of fire, can decompose to emit toxic and other hazardous decomposition products.

**Section 6: Accidental Release Measures**

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**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

**Containment** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust.

**Equipment and** Collect material and dispose

**Cleanup Procedures:** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning

**Section 7: Handling and Storage**

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

**Other Precautions:** 0.01 ppm high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm 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.

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

**Incompatibilities:** Store away from strong acids or oxidizing agents. Refer to Section 10.

**Section 8: Exposure Control / Personal Protection**

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**General / Local Exhaust:** Required in handling area  
**Engineering Controls:** levels  
**Mechanical:** Desirable to insure concentration of material below TLV/TWA  
**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:** Utilize organic vapor respirator if airborne levels are not maintained or if ventilation is inadequate.  
**Additional:** Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash

**Section 9: Physical and Chemical Properties**

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<b>State:</b> Solid	<b>Melting Point:</b> 3180°C	<b>Freezing Point:</b> N/A
<b>Color:</b> Gray	<b>Boiling Point/Range:</b> 5630 @ 760.0 mm/Hg oC	<b>pH:</b> N/A
<b>Molecular Wt.</b> 186.2	<b>Odor:</b> None	<b>Water Solubility:</b> Insoluble
<b>Evaporation rate:</b> N/A	<b>Flash Point:</b> N/A	<b>Part. Coeff (n-octanol/water):</b> N/A
<b>Upper Flam Limits:</b> N/A	<b>Lower Flam Limits:</b> N/A	<b>Vapor Pressure:</b> N/A
<b>VOC Content (lbs/gal):</b> N/A	<b>Viscosity:</b> N/A	<b>Autoignition Temp:</b> N/A

**Section 10: Stability and Reactivity**

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**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:** Mixing with oxidizing agents  
**Decomposition products:** Carbon monoxide, irritation and toxic fumes and gases, carbon dioxide.

**Section 11: Toxicological Information**

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**General Information:** No data available

**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:** No data available from IARC/ACGIH/NTP/OSHA for this product at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen  
**Sensitization:** Product is not expected to be a sensitizer.  
**Other Notes:** Not applicable.

**Section 12: Ecological Information**

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**General information:** Product not tested.

**Aquatic toxicity:** No specific data available. Do not allow large quantities of product to reach water, ground water,

**Degradation / Mobility info:** No specific data available.

**Bioaccumulative potential:** No specific data available.

**Section 13: Disposal Information**

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**Product disposal:** Dispose of product in accordance with local, regional, and national regulations. Consult with

**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

**Section 14: Transport Information**

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<b>DOT:</b> UN Number: 3089 group: II Powders, flammable, n.o.s pollutant: No	Class: 4.1	Packing Proper Shipping name: Metal Marine
<b>IMO/IMDG:</b> UN Number: 3089 G, S-G Powders, flammable, n.o.s pollutant: No Poison Inhalation Hazard: No	Class: 4.1	Packing group: II Proper Shipping name: Metal Marine
<b>IATA:</b> Same as DOT		
<b>OTHER:</b> Inquire for further transport information.		

**Comments:** None

**Section 15: Regulatory Information**

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**SARA 302 Component:** No chemicals in this material are subjected to reporting requirements of SARA Title III, section 302

**TSCA:** 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 313:** 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 DSL:** : All ingredients of this product comply with New Substances Notification requirements of the Canadian Environmental Protection Act (CEPA).

**European Union (EU) H228 - Flammable solid; SARA 311/312 Hazards:** Fire Hazard  
**Regulatory Information:** R36/37/38 - Irritating to eyes, respiratory system and skin  
 S22 - Do not breathe dust

**Section 16: Other Information**

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**HMIS Rating**

Health: 0  
 Fire: 0  
 Reactivity: 3  
 Personal Protection: B

**NFPA Rating**

Health: 0  
 Fire: 0  
 Reactivity: 3

**Disclaimer:** In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you

**SDS Author:** Dr. Ernest Addo

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