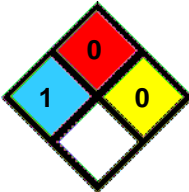


**Calcium Perrhenate Solution**

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: #00BFFF;">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;">C</td> </tr> </table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	C
HEALTH	1								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	C								

<b>1. Product And Company Identification</b>	
<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>
<p><b>Issue Date:</b> 12/30/2010</p> <p><b>Product Name:</b> Calcium Perrhenate Solution <b>CAS Number:</b> 13768-54-2 <b>Chemical Family:</b> Group 7 Metal <b>Chemical Formula:</b> Ca(ReO4)2 <b>MSDS Number:</b> 10009 <b>Product Code:</b> 1000-9</p> <p><b>Synonyms</b> Calcium Perrhenate Solution</p>	

<b>2. Composition/Information On Ingredients</b>			
	Ingredient Name	CAS Number	Percent Of Total Weight
	Calcium Carbonate	471-34-1	0 - 1
	Calcium perrhenate	13768-54-2	1 - 2
	Water	7732-18-5	97 - 100
This product contains 0.2% weight of Rhenium Metal.			

**Calcium Perrhenate Solution**

**Ru Rh Pd Ag Re Os Ir Pt Au**

**EMERGENCY OVERVIEW**

The best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated. Avoid elevated temperature. Avoid strong reducers, metals, and bases. May decompose oxidation products or rhenium.

**3. Hazards Identification**

**Primary Routes(s) Of Entry**

Eye: Likely  
 Inhalation: Likely  
 Skin: Likely  
 Ingestion: Likely

**Eye Hazards**

May cause eye burns.

**Skin Hazards**

May cause skin burns.

**Ingestion Hazards**

May cause gastrointestinal irritation; Does not cause serious toxic manifestations.

**Inhalation Hazards**

May cause irritation of the respiratory tract system and chest discomfort. Harmful if inhaled.

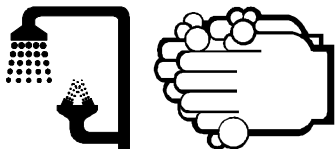
**Conditions Aggravated By Exposure**

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, physical, and toxicological properties have not been thoroughly investigated. No special precautions are needed beyond those normally employed for any chemical or material of low or unknown toxicity.

**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 contaminate clothing and shoes and wash before reuse.

**Ingestion**

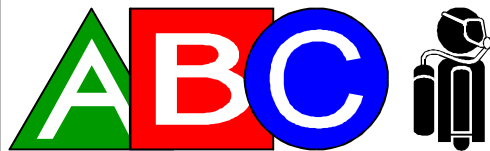
Not expected to be a problem in industry; However if swallowed and discomfort occurs, contact a physician.

**Inhalation**

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

**Calcium Perrhenate Solution**

Ru Rh Pd Ag Re Os Ir Pt Au

**Fire Fighting (Pictograms)****5. Fire Fighting Measures****Fire And Explosion Hazards**

Use proper safety equipment. Can decompose to calcium oxide fumes.

**Extinguishing Media**

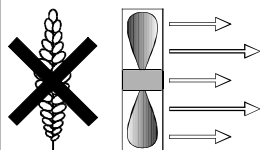
Use water spray, foam, dry chemical, carbon dioxide or medium for primary source.

**Fire Fighting Instructions**

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

**6. Accidental Release Measures**

Soak up (neutralize with dilute acetic acid or an absorbant such as vermiculite) and place in sealed acid proof container. Person protected with full face shield and NIOSH approved respirator cartridge or ammonia vapor and 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 fumes or vapors. Use compatible chemical resistant gloves. Wash hands thoroughly after handling.

**Handling Precautions**

Do not breathe vapor. Do not get into eyes, skin, on clothing. Avoid prolonged or repeated exposure.

**Storage Precautions**

Keep tightly closed.

**Work/Hygienic Practices**

Use good personal hygiene. Wash thoroughly after handling. Wash thoroughly with soap and water 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 away from volatile acids.



Calcium Perrhenate Solution

Ru Rh Pd Ag Re Os Ir Pt Au

**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)

**Eye/Face Protection**

ANSI approved safety glasses/goggles, full face shield.

**Skin Protection**

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

**Respiratory Protection**

NIOSH approved chemical cartridge respirator for particulates and dust, if there is potential for airborne exposure to exceed established threshold values, 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**

Light Yellow Liquid

**Odor**

None

**Chemical Type:** Mixture

**Physical State:** Liquid

**Boiling Point:** 100 °C

**Specific Gravity:** 1.0 g/cc

**Molecular Weight:** 540.59

**pH Factor:** 11.5

**Solubility:** Soluble

**10. Stability And Reactivity**

**Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Conditions To Avoid (Stability)**

High Temperatures.

**Incompatible Materials**

Strong reducers, metals, and bases.



# MATERIAL SAFETY DATA SHEET

## Calcium Perrhenate Solution

**Ru Rh Pd Ag Re Os Ir Pt Au**

<b>10. Stability And Reactivity - Continued</b>
<b><u>Hazardous Decomposition Products</u></b> Oxidation products of rhenium.
<b>11. Toxicological Information</b>
No Data Available...
<b>12. Ecological Information</b>
No Data Available...
<b>13. Disposal Considerations</b>
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.
<b>14. Transport Information</b>
<b><u>Proper Shipping Name</u></b> Non-Hazardous
<b><u>Additional Shipping Paper Description</u></b> IATA: This product follows the same specifications as DOT 49 CFR. Consult IATA regulations before shipping.
<b>15. Regulatory Information</b>
<b><u>U.S. Regulatory Information</u></b> This chemical is TSCA listed.
<b><u>SARA Section 313 Notification</u></b> This product is not required for reporting under SARA Title 313 requirements.
<b><u>Canadian Regulatory Information</u></b> 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.
<b>16. Other Information</b>
<b><u>NFPA Rating</u></b> Health: 1 Fire: 0 Reactivity: 0
<b><u>HMIS Rating</u></b> Health: 1 Fire: 0 Reactivity: 0 Personal Protection: C
<b><u>Revision/Preparer Information</u></b> MSDS Preparer: Wayne S. Sher This MSDS Supersedes A Previous MSDS Dated: 06/16/2005

# MATERIAL SAFETY DATA SHEET



## Calcium Perrhenate Solution

Ru Rh Pd Ag Re Os Ir Pt Au

### 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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