


# MATERIAL SAFETY DATA SHEET

## Rhenium (IV) Oxide

<b>NFPA</b> 	<b>HMIS</b> <table border="1"><tr><td>HEALTH</td><td style="text-align: center;">1</td></tr><tr><td>FLAMMABILITY</td><td style="text-align: center;">0</td></tr><tr><td>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  Company Contact: Joseph Fittos III Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: jfittos@colonialmetals.com Web Site: colonialmetals.com	<b>Manufacturer</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  Company Contact: Joseph Fittos III Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: jfittos@colonialmetals.com Web Site: colonialmetals.com
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<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
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**Issue Date:** 05/23/2007  
**Product Name:** Rhenium (IV) Oxide  
**CAS Number:** 12036-09-8  
**Chemical Family:** Platinum group metal oxide  
**Chemical Formula:** ReO<sub>2</sub>  
**MSDS Number:** 10008  
**Product Code:** 1000-8

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
rhenium (IV) oxide	12036-09-8	0 - 100

### EMERGENCY OVERVIEW

**Irritant**

### 3. Hazards Identification

**Primary Routes(s) Of Entry**  
Eye                      Likely  
Skin                     Likely  
Inhalation                Likely

**Eye Hazards**  
Causes irritation.

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## Rhenium (IV) Oxide

### 3. Hazards Identification - Continued

#### 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.

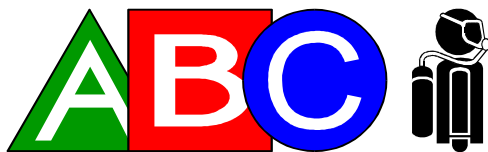
#### Ingestion

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

#### Extinguishing Media

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

#### Fire Fighting Instructions

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

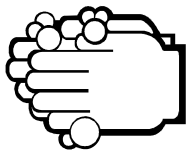
### 6. Accidental Release Measures

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

# MATERIAL SAFETY DATA SHEET

## Rhenium (IV) Oxide

### Handling & Storage (Pictograms)



### 7. Handling And Storage

#### 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)

#### 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

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## Rhenium (IV) Oxide

### 9. Physical And Chemical Properties - Continued

**Odor - Continued**

**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.

### 15. Regulatory Information

**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

### 16. Other Information

**NFPA Rating**

**Health:** 1

**Fire:** 0

**Reactivity:** 0

**HMIS Rating**

**Health:** 1

**Fire:** 0

**Reactivity:** 0

**Personal Protection:** J

# MATERIAL SAFETY DATA SHEET

## Rhenium (IV) Oxide

### 16. Other Information - Continued

#### HMIS Rating - Continued

#### Revision/Preparer Information

**MSDS Preparer:** Joseph J. Fittos III

**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.

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