


# MATERIAL SAFETY DATA SHEET

## Iridium Powder

<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;">3</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	3	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	1								
FLAMMABILITY	3								
REACTIVITY	0								
PERSONAL PROTECTION	J								

### 1. Product And Company Identification

**Supplier**

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

**Manufacturer**

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

**Supplier Emergency Contacts & Phone Number**

**Chemtrac:** 800-424-9300  
**World Wide - Call COLLECT to U.S:** 703-527-3887

**Manufacturer Emergency Contacts & Phone Number**

**Chemtrac:** 800-424-9300  
**World Wide - Call COLLECT to U.S:** 703-527-3887

**Issue Date:** 05/12/2008

**Product Name:** Iridium Powder  
**Chemical Name:** Iridium  
**CAS Number:** 7439-88-5  
**Chemical Family:** Platinum Group Metal  
**Chemical Formula:** Ir  
**MSDS Number:** 3000  
**Product Code:** 3000

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Iridium	7439-88-5	99.9

### EMERGENCY OVERVIEW

**Flammable. Irritant.**

**To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated. Product incompatible with molton salts such as NaCl and NaCn.**

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## Iridium Powder

### Hazards Identification (Pictograms)



### 3. Hazards Identification

#### Primary Routes(s) Of Entry

Eyes: Likely  
Inhalation: Likely, Fine Dust  
Skin: Likely  
Ingestion: Likely

#### Eye Hazards

Irritation

#### Skin Hazards

Irritation. May be harmful if absorbed through skin.

#### Ingestion Hazards

May be harmful.

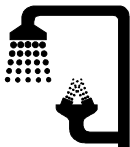
#### Inhalation Hazards

Irritation to respiratory tract and mucous membranes.

#### Conditions Aggravated By Exposure

May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

### First Aid (Pictograms)



### 4. First Aid Measures

#### Eye

Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately.

#### Skin

Flush area for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately. Remove contaminated clothing and shoes and wash before reuse.

#### Ingestion

If swallowed wash out mouth with water provided victim is conscious. Never give anything by mouth to an unconscious person. Contact a physician immediately.

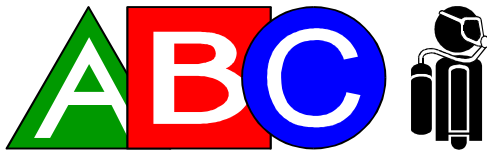
#### Inhalation

Remove to fresh air immediately. If victim is not breathing provide artificial respiration. If breathing is difficult give oxygen. Contact a physician immediately.

# MATERIAL SAFETY DATA SHEET

## Iridium Powder

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

**Flash Point:** NA °C

**Flash Point Method:** NA

**Autoignition Point:** NA °C

**Flammability Class:** NA

#### Fire And Explosion Hazards

Finely divided iridium may be a moderate fire hazard. As with any metal, upon heating may melt and with continued heating produce hazardous vapors. Emits toxic fumes under fire conditions.

#### Extinguishing Media

Suitable: Dry chemical powder

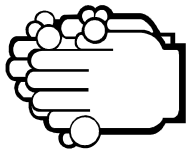
#### Fire Fighting Instructions

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

### 6. Accidental Release Measures

Sweep up and place in a sealed container, avoid raising dust. 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 Precautions

Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Avoid breathing dust.

#### Storage Precautions

Keep container sealed away from heat, sparks, and open flame.

#### Work/Hygienic Practices

Always use good personal hygiene after handling.

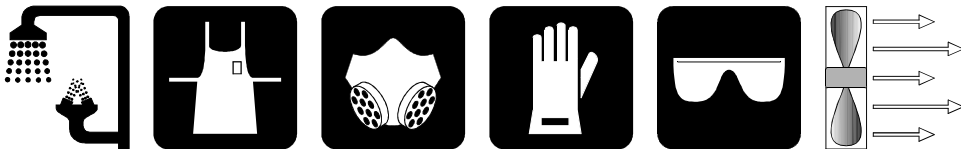
#### Other Precautions

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.

# MATERIAL SAFETY DATA SHEET

## Iridium Powder

### 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 - Dust (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 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

Silver white metal/powder

#### Odor

Slight process odor

**Chemical Type:** Pure

**Physical State:** Solid

**Melting Point:** 2140 °C

**Boiling Point:** 4130 °C

**Specific Gravity:** 22.65

**Molecular Weight:** 192.2

**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

#### Incompatible Materials

Finely divided powder can exhibit catalytic activity with materials such as fluorine; molten salts such as NaCl and NaCh. Strong oxidizing agents, halogens, tin/ tin oxides, lead, zinc.

# MATERIAL SAFETY DATA SHEET

## Iridium Powder

### 10. Stability And Reactivity - Continued

#### Hazardous Decomposition Products

Iridium oxides.

### 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

#### Additional Shipping Paper Description

Always consult IATA manual before 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 of the information required by the CPR.

DSL: Yes

NDSL: No

#### European Union (EU) Regulatory Information

Symbol of danger: F- Xi

Indication of Danger: Highly Flammable. Irritant.

R: 11-36

Risk Statements: Highly flammable. Irritating to eyes.

S: 16-26

Safety Statements: Keep away from sources of ignition- no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### DSCL - Europe (Pictograms)



### 16. Other Information

#### NFPA Rating

Health: 1

Fire: 3

Reactivity: 0

# MATERIAL SAFETY DATA SHEET

## Iridium Powder

### 16. Other Information - Continued

#### HMIS Rating

Health: 1

Fire: 3

Reactivity: 0

Personal Protection: J

#### Revision/Preparer Information

MSDS Preparer: Joseph J. Fittos III

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supercedes A Previous MSDS Dated: 04/28/2008

#### **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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