


# MATERIAL SAFETY DATA SHEET

## Iridium (III) Chloride Hydrate

<b>NFPA</b> 	<b>HMIS</b> <table border="1"><tr><td>HEALTH</td><td style="text-align: center;">2</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	2	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	2								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	J								

<b>1. Product And Company Identification</b>	
<b>Supplier</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs <b>Telephone Number:</b> 410-398-7200 <b>FAX Number:</b> 410-398-2918 <b>E-Mail:</b> mdoss@colonialmetals.com <b>Web Site:</b> www.colonialmetals.com	<b>Manufacturer</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs <b>Telephone Number:</b> 410-398-7200 <b>FAX Number:</b> 410-398-2918 <b>E-Mail:</b> mdoss@colonialmetals.com <b>Web Site:</b> www.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
<b>Issue Date:</b> 03/07/2012  <b>Product Name:</b> Iridium (III) Chloride Hydrate <b>CAS Number:</b> 14996-61-3 <b>Chemical Family:</b> Platinum Group Metal Complex <b>Chemical Formula:</b> IrCl <sub>3</sub> .xH <sub>2</sub> O <b>MSDS Number:</b> 3017 <b>Product Code:</b> 3017  <b>Synonyms</b> Iridium trichloridehydrate	

<b>2. Composition/Information On Ingredients</b>			
Ingredient Name	CAS Number	Percent Of Total Weight	
Iridium (III) Chloride Hydrate	14996-61-3	99	

<b>EMERGENCY OVERVIEW</b>
Irritant.  To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

# MATERIAL SAFETY DATA SHEET

## Iridium (III) Chloride Hydrate

### 3. Hazards Identification

#### Primary Routes(s) Of Entry

Eyes: Likely  
Skin: Likely  
Ingestion: Likely  
Inhalation: Likely

#### Eye Hazards

Causes irritation.

#### Skin Hazards

Causes irritation. May be harmful if absorbed through the skin.

#### Ingestion Hazards

May be harmful if swallowed.

#### Inhalation Hazards

Causes respiratory tract irritation. May be harmful if inhaled.

### 4. First Aid Measures

#### Eye

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

#### Skin

Immediately wash with soap and copious amounts 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 the 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. Contact a physician immediately.

### 5. Fire Fighting Measures

**Flash Point:** NA °C

**Autoignition Point:** NA °C

**Flammability Class:** NA

#### Fire And Explosion Hazards

Use proper safety equipment. Can decompose to emit toxic fumes.

#### Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Fire Fighting Instructions

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

# MATERIAL SAFETY DATA SHEET

## Iridium (III) Chloride Hydrate

### 6. Accidental Release Measures

Sweep or soak up and place in a sealed container. Avoid dust formation. Avoid breathing dust. Person protected with full face shield and approved respirator and cartridge for vapor and dust and other ppe as in section 8. Ventilate area and wash spill site after pick up is completed.

### 7. Handling And Storage

#### Handling Precautions

Avoid formation of dusts and aerosols. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Use in a well ventilated area.

#### Storage Precautions

Keep in a tightly sealed container in a cool, dry well ventilated place.

#### Work/Hygienic Practices

Always use good personal hygiene after handling. Wash thoroughly with soap and water.

#### 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.

### 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, full face shield

#### Skin Protection

Rubber/Neoprene (use compatible chemical-resistant gloves)

#### Respiratory Protection

NIOSH approved chemical cartridge respirator for particulates and acid gas 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

dark brown crystals

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** 1405 °F 763 °C

**Molecular Weight:** 298.58

# MATERIAL SAFETY DATA SHEET

## Iridium (III) Chloride Hydrate

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Incompatible Materials**

Strong oxidizing agents, acids, bases, alkaline metal salts, copper, zinc salts, cyanides.

**Hazardous Decomposition Products**

Hydrogen chloride gas, iridium oxides.

### 11. Toxicological Information

**Acute Studies**

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**

Considered non-hazardous for shipping

**Additional Shipping Paper Description**

IATA: Same as DOT. Always consult IATA manual before shipping.

### 15. Regulatory Information

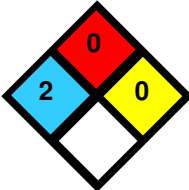
**Canadian Regulatory Information**

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

DSL: Yes

# MATERIAL SAFETY DATA SHEET

## Iridium (III) Chloride Hydrate

<b>NFPA</b>	<b>HMIS</b>								
	<table border="1"><tr><td>HEALTH</td><td style="text-align: center;">2</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	2	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	2								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	J								

### 16. Other Information

#### Revision/Preparer Information

MSDS Preparer: Michael Doss - Dir Reg Affairs

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supersedes A Previous MSDS Dated: 08/27/2008

#### **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.**