


# MATERIAL SAFETY DATA SHEET

## Dihydrogen Hexachloro Iridate (IV) Hydrate

<b>NFPA</b> 	<b>HMIS</b> <table border="1"><tr><td>HEALTH</td><td style="text-align: center;">3</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	3	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	3								
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
<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

**Issue Date:** 03/12/2009

**Product Name:** Dihydrogen Hexachloro Iridate (IV) Hydrate  
**Chemical Name:** Chloroiridic Acid  
**CAS Number:** 16941-92-7  
**Chemical Family:** Platinum Group Metal Salts  
**Chemical Formula:** H<sub>2</sub>IrCl<sub>6</sub>\* "X" H<sub>2</sub>O ("X" = Number of waters)  
**MSDS Number:** 3001  
**Product Code:** 3001

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Chloroiridic Acid	16941-92-7	80

### EMERGENCY OVERVIEW

**Corrosive.**  
**Causes burns.**  
**Limited evidence of carcinogenic effect.**  
**Possible mutagen.**

To the best of our knowledge the chemical, physical and toxicological properties of this compound have not been thoroughly investigated.

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## Dihydrogen Hexachloro Iridate (IV) Hydrate

### Hazards Identification (Pictograms)



### 3. Hazards Identification

#### Primary Routes(s) Of Entry

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

#### Eye Hazards

Harmful. Material is extremely destructive to the tissue of the eyes.

#### Skin Hazards

Harmful if on skin or absorbed through the skin. Material is extremely destructive to the tissue of the skin.

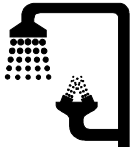
#### Ingestion Hazards

Harmful if swallowed.

#### Inhalation Hazards

Harmful if inhaled. Material is extremely destructive to the tissue of the upper respiratory tract and mucous membranes.

### First Aid (Pictograms)



### 4. First Aid Measures

#### Eye

Flush for 15 minutes with plenty of water. Contact a physician immediately.

#### Skin

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

#### Ingestion

Wash out mouth with water provided the victim is conscious. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

#### Inhalation

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

# MATERIAL SAFETY DATA SHEET

## Dihydrogen Hexachloro Iridate (IV) Hydrate

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

**Flash Point:** NA °C

**Autoignition Point:** NA °C

**Flammability Class:** NA

#### Fire And Explosion Hazards

Product is not flammable, use proper measure to fight surrounding fire. Use proper safety equipment. Can decompose to emit toxic hydrogen chloride, chlorine gas and metal oxide fumes.

#### Extinguishing Media

Carbon dioxide, dry chemical powder or appropriate foam.

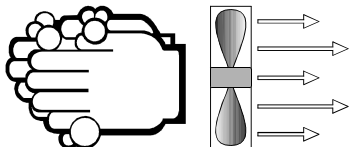
#### Fire Fighting Instructions

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

### 6. Accidental Release Measures

Cover with dry lime or soda ash and sweep up and place in a sealed container taking care not to raise dust. Person protected with full face shield and NIOSH approved respirator and cartridge for acid gas and other personal protective equipment. Ventilate area and wash spill site after pick up is complete.

### Handling & Storage (Pictograms)



### 7. Handling And Storage

#### Handling Precautions

Do not breathe dust. Avoid contact with eyes, skin and clothing. Avoid repeated or prolonged exposure. Ensure good ventilation in work area.

#### Storage Precautions

Store in a cool, dry place in a tightly sealed container away from oxidizing agents.

#### Work/Hygienic Practices

Always use good personal hygiene after handling.

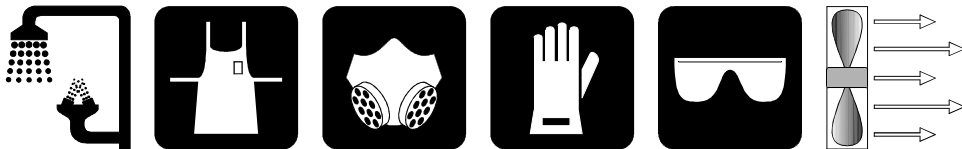
#### Other Precautions

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

## Dihydrogen Hexachloro Iridate (IV) Hydrate

### 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 respirator for 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

Black/Green wax like solid

#### Odor

Acrid odor

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** Decomposes °C

**Boiling Point:** 65 °C

**Specific Gravity:** NE

**Molecular Weight:** 512.25

**Solubility:** Soluble

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

#### Conditions To Avoid (Stability)

Elevated temperature and moisture.

#### Incompatible Materials

Strong oxidizing agents.

#### Hazardous Decomposition Products

Hydrochloric acid, hydrogen chloride gas, chlorine vapors, metal oxide fumes.

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## Dihydrogen Hexachloro Iridate (IV) Hydrate

### 11. Toxicological Information

To the best of our knowledge the physical, chemical, and toxicological effects of this compound have not been fully investigated.

### 12. Ecological Information

No Data Available...

### 13. Disposal Considerations

Place in sealed container. 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

Corrosive solid, acidic, inorganic, n.o.s.

#### Hazard Class

8

#### DOT Identification Number

3260

#### DOT Shipping Label

Corrosive

#### Packaging Requirements

PG II

#### Additional Shipping Paper Description

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

### 15. Regulatory Information

#### U.S. Regulatory Information

TSCA listed.

#### Canadian Regulatory Information

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

DSL: No

NDSL: No

#### European Union (EU) Regulatory Information

Corrosive: C

Risk Phrases: 20/21/22-34-40

Risk Statements:

Harmful by inhalation, in contact with skin and if swallowed. Causes burns. Limited evidence of carcinogenic effect.

Safety phrases: 22-26-27-36/37/39-45

Safety Phrases:

Do not breathe dust. In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

Take off immediately all contaminated clothing. Wear suitable protective clothing, glove and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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### DSCG - Europe (Pictograms)



### 16. Other Information

#### NFPA Rating

Health: 3

Fire: 0

Reactivity: 0

#### HMIS Rating

Health: 3

Fire: 0

Reactivity: 0

Personal Protection: J

#### Revision/Preparer Information

MSDS Preparer: Joseph J. Fittos III

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supersedes A Previous MSDS Dated: 03/15/1998

### 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.