



# MATERIAL SAFETY DATA SHEET

## Dihydrogen Hexachloro Iridate (IV) Hydrate

|   |  |            |                         |
|---|--|------------|-------------------------|
| <b>1. Product And Company Identification</b>  |  |            |                         |
| <p><b>Supplier</b><br/>Colonial Metals, Inc.<br/>Building 20<br/>505 Blue Ball Road<br/>Elkton, MD 21921 United States</p> <p><b>Company Contact:</b> Joseph J. Fittos III<br/><b>Telephone Number:</b> 410-398-7200<br/><b>FAX Number:</b> 410-398-2918<br/><b>E-Mail:</b> jfittos@colonialmetals.com<br/><b>Web Site:</b> colonialmetals.com</p>  | <p><b>Manufacturer</b><br/>Colonial Metals, Inc.<br/>Building 20<br/>505 Blue Ball Road<br/>Elkton, MD 21921 United States</p> <p><b>Company Contact:</b> Joseph J. Fittos III<br/><b>Telephone Number:</b> 410-398-7200<br/><b>FAX Number:</b> 410-398-2918<br/><b>E-Mail:</b> jfittos@colonialmetals.com<br/><b>Web Site:</b> colonialmetals.com</p> |            |                         |
| <p><b>Supplier Emergency Contacts &amp; Phone Number</b><br/>Chemtrac: 800-424-9300<br/>World Wide - Call COLLECT to U.S: 703-527-3887</p>  | <p><b>Manufacturer Emergency Contacts &amp; Phone Number</b><br/>Chemtrac: 800-424-9300<br/>World Wide - Call COLLECT to U.S: 703-527-3887</p>   |            |                         |
| <p><b>Issue Date:</b> 10/14/2006</p> <p><b>Product Name:</b> Dihydrogen Hexachloro Iridate (IV) Hydrate<br/><b>Chemical Name:</b> Chloroiridic Acid<br/><b>CAS Number:</b> 16941-92-7<br/><b>Chemical Family:</b> Platinum Group Metal Salts<br/><b>Chemical Formula:</b> H<sub>2</sub>IrCl<sub>6</sub>* "X" H<sub>2</sub>O ("X" = Number of waters)<br/><b>MSDS Number:</b> 3001<br/><b>Product Code:</b> 3001</p> |  |            |                         |
| <b>2. Composition/Information On Ingredients</b>  |  |            |                         |
|   | Ingredient Name  | CAS Number | Percent Of Total Weight |
|   | Chloroiridic Acid  | 16941-92-7 | 80                      |
| <b>EMERGENCY OVERVIEW</b>   |  |            |                         |
| <p>To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated. Avoid elevated temperature. Product incompatible with strong reducing agents. Can decompose hydrochloric acid ( Hydrogen Chloride) and chlorine vapors.</p>   |  |            |                         |
| <b>Hazards Identification (Pictograms)</b>  |  |            |                         |
|   |  |            |                         |
| <b>3. Hazards Identification</b>  |  |            |                         |
| <p><b>Primary Routes(s) Of Entry</b></p> <p>Inhalation:       Likely<br/>Skin:               Likely<br/>Ingestion:               Likely</p>   |  |            |                         |



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### 3. Hazards Identification - Continued

#### Eye Hazards

Severe irritation

#### Skin Hazards

Irritation; Can cause redness, pain or skin burns

#### Ingestion Hazards

May cause gastrointestinal irritation; poisoning is unlikely on a single exposure.

Does not cause serious toxic manifestations.

#### Inhalation Hazards

Irritation to the mucous membranes

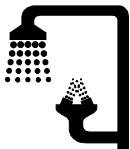
#### Conditions Aggravated By Exposure

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, the physical, and toxicological properties have not been thoroughly investigated.

#### 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 contaminated clothing and shoes and wash before reuse.

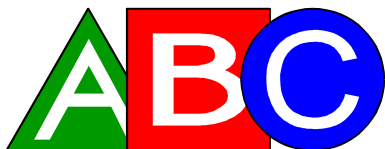
#### Ingestion

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.

#### Fire Fighting (Pictograms)





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### 5. Fire Fighting Measures

**Flash Point Method:** NA

**Flammability Class:** NA

**Fire And Explosion Hazards**

Use proper safety equipment. Can decompose to emit toxic hydrogen chloride or chlorine gas.

**Extinguishing Media**

Water spray, CO2, foam or medium to fight primary source.

**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. Person protected with full face shield and NIOSH approved respirator and cartridge for acid gas.

### 7. Handling And Storage

**Handling And Storage Precautions**

Avoid contact with eyes, prolonged or repeated contact with skin. Use compatible chemical resistant gloves.

Wash hands thoroughly 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.

**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

**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



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|   |
|---|
| <b>8. Exposure Controls/Personal Protection - Continued</b>   |
| <u>Other/General Protection - Continued</u><br>for washing.   |
| <b>9. Physical And Chemical Properties</b>  |
| <u>Appearance</u><br>Black/Green wax like solid<br><br><u>Odor</u><br>Acrid odor<br><br><b>Chemical Type:</b> Mixture<br><b>Physical State:</b> Solid<br><b>Melting Point:</b> Decomposes °C<br><b>Boiling Point:</b> NA °C<br><b>Specific Gravity:</b> NE<br><b>Molecular Weight:</b> 512.25<br><b>Vapor Pressure:</b> NA<br><b>Vapor Density:</b> NA<br><b>pH Factor:</b> NA<br><b>Solubility:</b> Soluble<br><b>Evaporation Rate:</b> NA |
| <b>10. Stability And Reactivity</b>   |
| <b>Stability:</b> Stable<br><b>Hazardous Polymerization:</b> Will not occur<br><br><u>Conditions To Avoid (Stability)</u><br>Elevated temperature<br><br><u>Incompatible Materials</u><br>Strong reducing agents<br><br><u>Hazardous Decomposition Products</u><br>Hydrochloric acid (Hydrogen Chloride), chlorine vapors   |
| <b>11. Toxicological Information</b>  |
| No Data Available...  |
| <b>12. Ecological Information</b>   |
| No Data Available...  |
| <b>13. Disposal Considerations</b>  |
| Place in sealed container. Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation<br><br>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>  |
| No Data Available...  |



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### 15. Regulatory Information

No Data Available...

### 16. Other Information

#### Revision/Preparer Information

**MSDS Preparer:** Wayne Sher

**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, 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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