

## Safety Data Sheet

### 29 CFR 1910.1200

#### Section 1: Company and Product Identification

**Product Name:** Bis(tetraethylammonium)hexachloroosmate (IV)

**Product Code:** 4040

**CAS #:** 41119-82-8

**Company:** Colonial Metals, Inc.  
 Building 20  
 505 Blue Ball Road  
 Elkton, MD 21921 United States  
 Company Contact: EHS Director  
 Telephone Number: 410-398-7200  
 FAX Number: 410-398-2918  
 E-Mail : info@colonialmetals.com  
 Web Site: www.colonialmetals.com



www.colonialmetals.com

**Emergency Response:** For Hazardous Materials [or Dangerous Goods] Incident  
 Spill, Leak, Fire, Exposure, or Accident  
 Call CHEMTREC  
 +1 703-741-5970 / 1-800-424-9300 CCN 5252

#### Section 2: Hazards Identification

GHS07

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**Hazard Pictograms:**



**Signal Word:** Warning

**Hazard Category:** Skin corrosion/irritation Cat 2  
 Serious eye damage/eye irritation Cat 3  
 Acute tox, inh. Cat 4  
 Specific target organ tox, single exp. Cat 3 (resp irrit)

**Hazard Statements:** H315: Causes skin irritation  
 H320: Causes eye irritation  
 H332: Harmful if inhaled  
 H335: May cause respiratory irritation

**Precautionary Statements:** P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
 P264: Wash thoroughly after handling  
 P271: Use only outdoors or in a well-ventilated area  
 P280: Wear protective gloves/protective clothing/eye protection/face protection  
 P302+352: IF ON SKIN: Wash with soap and water  
 P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position  
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell  
 P321: Specific treatment (see ... on this label)  
 P332+313: If skin irritation occurs: Get medical advice/attention  
 P337+313: If eye irritation persists get medical advice/attention  
 P362: Take off contaminated clothing and wash before reuse  
 P403+233: Store in a well ventilated place. Keep container tightly closed  
 P405: Store locked up  
 P501: Dispose of contents/container in accordance with local/regional/national/international rules.

**Hazards not  
otherwise classified:**

Avoid breathing dust, fume, gas, mist, vapors, and spray.

### Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Bis(tetraethylammonium)hexachloroosmate (IV)	Warning	41119-82-8	
<b>Chemical Name:</b> Bis(tetraethylammonium)hexachloroosmate (IV) <b>Chemical Family:</b> Platinum Group Metal <b>Chemical Formula:</b> $[N(CH_2CH_3)_4]_2[O_8Cl_6]$	Skin Irrit.2;Eye Irrit.2A;STOT SE3;H315, H319,H335		

### Section 4: First Aid Measures

**General Info:** Ensure proper ventilation.

**Notable Exposure symptoms:** Irritation to skin, eyes and areas of contact.

**If ingested:** Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing. If swallowed, do not induce vomiting unless directed to do so by medical personnel. **CONTACT A PHYSICIAN IMMEDIATELY**

**If inhaled:** Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible.. If victim is not breathing provide artificial respiration. If breathing is difficult give oxygen. Get medical attention immediately.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. **CONTACT A PHYSICIAN** if irritation/discomfort persists.

**Skin contact:** Take off immediately all contaminated clothing. Rinse with water thoroughly. **CONTACT A PHYSICIAN** if irritation/discomfort persists.

**Additional Info:** Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

### Section 5: Fire Fighting Measures

**General Info:** There are no fire or explosion hazards associated with this product

**Extinguishing Method / Equipment:** In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam. Water may be ineffective.

**Hazardous Decomposition Info:** Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear.

### Section 6: Accidental Release Measures

**Personal precautions, protective equipment and procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors or mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust

**Containment Equipment and Procedures:** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust. Collect material and dispose

Small Spills: Sweep and collect to waste receptacles.

**Cleanup Procedures:** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available. Ventilate area and wash spill site after cleanup is complete

## Section 7: Handling and Storage

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**Safe Handling** Avoid contact with skin and clothing. Avoid creating dust. Avoid contact with eyes. This product is

**Precautions:** hygroscopic

**Recommendations for Storage:** Store in original vented container.

**Other Precautions:** Wash thoroughly with soap and water after handling

## Section 8: Exposure Control / Personal Protection

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**General / Ventilation:** Local Exhaust: Yes

**Engineering Controls:** Mechanical: Yes

**Controls:** Other: Fume Hood

**Work Clothing:** Protective work clothing which covers skin and prevents exposures. Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

**Eye/face protection:** Wear safety glasses with side shields or goggles or face shield.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** NIOSH approved chemical cartridge respirator for acid gas and dust/mist/fume or self-contained breathing apparatus with full face shield.

## Section 9: Physical and Chemical Properties

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<b>State:</b> Solid	<b>Melting Point:</b> N/A	<b>Freezing Point:</b> N/A
<b>Color:</b> Orange	<b>Boiling Point/Range:</b> N/A	<b>pH</b> N/A
<b>Molecular Wt.</b> 663.45	<b>Odor:</b> N/A	<b>Water Solubility:</b> N/A
<b>Evaporation rate:</b> N/A	<b>Flash Point:</b> N/A	<b>Packing Density:</b> N/A
<b>Upper Flam Limits:</b> N/A	<b>Lower Flam Limits:</b> N/A	<b>Vapor Density:</b> N/A
<b>VOC Content (lbs/gal):</b> N/A	<b>Viscosity:</b> N/A	<b>Autoignition Temp:</b> N/A

## Section 10: Stability and Reactivity

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**General:** This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources. **Conditions To Avoid (Stability):** Exposure to moisture may affect product quality.

**Incompatible materials:** Strong oxidizing agents

**Decomposition products:** Hazardous decomposition products formed under fire conditions - nitrogen oxides, (NOx), Hydrogen Chloride

## Section 11: Toxicological Information

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**General Information:** Acute Inhalation Effects: May cause respiratory tract irritation.

**Toxicological Information (product):** To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

**General information:** Product not tested. Toxicity - Aquatic And Terrestrial Plants

**Aquatic toxicity:** No specific data available. Do not allow large quantities of product to reach water, ground water, water courses or sewer systems.

### Section 13: Disposal Information

**Product disposal:** Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation. RCRA Information OsO4 is a listed EPA Hazardous Waste - P087

**Container disposal:** Treat empty containers with extra care. Consult waste contractor.

### Section 14: Transport Information

**DOT:** Not dangerous goods  
**IMO/IMDG:** Not dangerous goods  
**IATA:** Not dangerous goods  
**OTHER:** See IATA regulations

### Section 15: Regulatory Information

**TSCA:** Some of the ingredients of this product are listed under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory. This product has been manufactured in full compliance with all TSCA regulations under 40 CFR 707.20

**SARA 313 SARA Section 313 Notification:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 302 Components:**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Canadian DSL:** All ingredients of this product comply with the New Substances Notification requirements of the Canadian Environmental Protection Act (CEPA).

**European Union (EU) R20/21/22 - Harmful by inhalation, in contact with skin, and if swallowed.**

**Regulatory** R24/25 - Toxic in contact with skin and if swallowed

**Information:** S7/9 - Keep container tightly closed and in a well-ventilated place  
S24/25 - Avoid contact with skin and eyes

### Section 16: Other Information

**NFPA Rating**

Health: 2  
Fire: 0  
Reactivity: 0  
Other:

**HMIS Rating**

Health: 2  
Fire: 0  
Reactivity: 0  
Personal  
Protection: C

**Precautionary Label:**

Warning

*Disclaimer: In compliance with the OSHA Hazard communication Standard, 29 C.F.R 1910.1200, we are providing you with a Safety Data Sheet (SDS) 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 representation as to the accuracy of the information in the SDS. 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 SDS to your customer.*

*Colonial Metals, Inc.*

**SDS Author:** Colonial Metals Inc.- An Ames Goldsmith Company

**Version Date:**

10/15/2019