

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Dichlorotris(triphenylphosphine)osmium(II)

Product Code: 4041

CAS #: 40802-32-2

Company: Colonial Metals, Inc.
 Building 20
 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
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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 %
Dichlorotris(triphenylphosphine)osmium(II)	Warning	40802-32-2	
Chemical Name: Dichlorotris(triphenylphosphine)osmium(II) Chemical Family: Platinum Group Metal Chemical Formula: C ₅₄ H ₄₅ Cl ₂ P ₃ O _s	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, CO₂, 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

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.

Storage:

Other Precautions: Wash thoroughly with soap and water after handling

Section 8: Exposure Control / Personal Protection

General / Ventilation: Local Exhaust: Yes

Engineering Controls: Mechanical: Yes

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

State: Solid	Melting Point: N/A	Freezing Point: N/A
Color: Green	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 1048	Odor: N/A	Water Solubility: N/A
Evaporation rate: N/A	Flash Point: N/A	Packing Density: N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Vapor Density: N/A
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A

Section 10: Stability and Reactivity

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 may be formed under fire conditions - nitrogen oxides, (NO_x), Hydrogen Chloride

Section 11: Toxicological Information

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.

Section 12: Ecological Information

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