

Safety Data Sheet
29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Iridium(IV) hydroxide ["Iridium oxide dihydrate"]

Product Code: 3004

CAS #: 30980-84-8

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: Supplier Emergency Contacts & Phone Number
Chemtrec: 800-424-9300
World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

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Hazard Pictograms:

Signal Word: Not Applicable

Hazard Category: Non-classified

Hazard Statements: Not Applicable

Precautionary Statements: P103: Read label before use
P280: Wear protective gloves/protective clothing/eye protection/face protection
P264: Wash thoroughly after handling

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

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Iridium(IV) oxide	Not a hazardous substance or mixture	12030-49-8	99.9
Chemical Name: Iridium(IV) oxide anhydrous, Iridium dioxide Chemical Family: Platinum Group Metal Salts Chemical Formula: IrO ₂			

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.

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. 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. Get medical attention if irritation develops or persists.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or 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: Finely divided iridium may be a moderate fire hazard. As with any metal, upon heating may melt and with continued heating produce hazardous vapors. Emits toxic fumes under fire conditions.

Extinguishing Method / Equipment: In case of fire, dry chemical powder

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: Keep unnecessary personnel away. Wear appropriate protective equipment (SCBA) and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so and wash spill site after clean up is complete. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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.

Section 7: Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

Recommendations for Storage: Store in cool, dry area in a tightly closed product container away from sources of ignition or flame.

Do not store together with acids. Store away from organic solvents.

Other Precautions: This material is not flammable

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: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired,

Protection: use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Additional Information: Do not let product enter drains.

Information:

Section 9: Physical and Chemical Properties

State: Powder	Melting Point: Unknown	Freezing Point: N/A
Color: Black	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 260.25	Odor: Unknown	Water Solubility: Unknown
Evaporation rate: N/A	Flash Point: N/A	Part. Coeff (n-octanol/water): N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Vapor Pressure: Unknown
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A
Specific Gravity: 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)
Elevated temperature.

Incompatible materials: Strong oxidizing agents

Decomposition products: Not known

Section 11: Toxicological Information

General Information:

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

Likely Routes of Exposure: Eye Contact
Skin Contact
Inhalation
Ingestion - possible, but considered unlikely.

Toxicological Information (contained substances)

Carcinogenicity or mutagenicity: No data available

Sensitization: Product is not expected to be a sensitizer.

Section 12: Ecological Information

General information: Product not tested.

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

Degradation / Mobility info: No specific data available.

Bioaccumulative potential: No specific data available.

Section 13: Disposal Information

Product disposal: Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation
Container disposal: Treat empty containers with extra care. Consult waste contractor.
Other considerations: NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

Section 14: Transport Information

DOT: Considered non-hazardous for transport.
IMO/IMDG: Considered non-hazardous for transport.
IATA: Considered non-hazardous for transport.
OTHER: Inquire for further transport information.

Section 15: Regulatory Information

TSCA: All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian DSL: 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
 NDSL: No

Section 16: Other Information

<u>NFPA Rating</u>	<u>HMIS Rating</u>
Health: 0	Health: 0
Fire: 0	Fire: 0
Reactivity: 0	Reactivity: 0
	Personal
	Protection: J

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 believe to be correct; however, you (the customer), should preform 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.

SDS Author: Dr. Ernest Addo

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