

Product# 3048

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Tricyclohexylphosphine(1,5-cyclooctadiene) (pyridine) Iridium (I) hexafluorophosphate

Product Code: 3048

Company: Colonial Metals, Inc.
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 505 Blue Ball Road
 Elkton, MD 21921 United States
 Company Contact: EHS Director
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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

Hazard Pictograms:



Signal Word: Warning

Hazard Category: Acute tox, oral Cat 5
 Skin corrosion/irritation Cat 2
 Serious eye damage/eye irritation Cat 3
 Acute tox, inh. Cat 4

Hazard Statements: H303: May be harmful if swallowed
 H315: Causes skin irritation
 H320: Causes eye irritation
 H332: Harmful if inhaled

Precautionary Statements: P202: Do not handle until all safety precautions have been read and understood
 P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
 P264: Wash thoroughly after handling
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P308+313: IF exposed or concerned: Get medical advice/attention
 P402+404: Store in a dry place. Store in a closed container
 P501: Dispose of contents/container in accordance with local/national/international rules.

No ingredients are hazardous according to OSHA criteria

Hazards not otherwise classified:

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

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Tricyclohexylphosphine(1,5-cyclooctadiene) (pyridine) Iridium (I) hexafluorophosphate	Irritant	64536-78-3	99 - 100
Chemical Name: Crabtree's Catalyst Chemical Family: Organometallic Complex Chemical Formula: C ₃₁ H ₅₀ F ₆ NP ₂ Ir			

Section 4: First Aid Measures

General Info: Ensure proper ventilation.**Notable Exposure symptoms:** Irritation to skin, eyes and areas of contact.**If ingested:** Wash out mouth with water provided the victim is conscious. Never give anything by mouth to an unconscious person. Contact a physician immediately**If inhaled:** Remove to fresh air immediately. If victim is not breathing provide artificial respiration. Contact a physician**Eye contact:** Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately.**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: Wear self-contained breathing apparatus for firefighting if necessary**Extinguishing Method / Equipment:** Use water spray, foam, dry chemical, carbon dioxide or medium for primary source**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. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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:** Contain actively spilling material if safe and easy to do so, avoid generating dust. Collect material and dispose**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 a tightly sealed container in a cool, dry, well ventilated place**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.**Section 8: Exposure Control / Personal Protection**

General / Engineering Controls: Ventilation: Local Exhaust: Yes
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 particulates and acid gas or self-contained breathing apparatus with full face shield.**Additional Information:** Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing. Do not let product enter drains.

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 347°F 175°C	Freezing Point: N/A
Color: Orange Crystals	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 804.89 g/mol	Odor: Odorless	Water Solubility: N/A
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: 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.

Incompatible materials: Strong oxidizing agents. Air sensitive

Decomposition products: Carbon oxides, nitrogen oxides (NOx), oxides of phosphorus, hydrogen fluoride, iridium oxides.

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.

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. Not Dangerous Goods

IMO/IMDG: Considered non-hazardous for transport.

IATA: Considered non-hazardous for transport.

Section 15: Regulatory Information

SARA Section 311/312 Hazards: Acute Health Hazard

European Union (EU) Regulatory Information: **Symbol of Danger:** Xi
Indications of Danger: Irritant

R: 36/37/38

Risk Statements: Irritating to the eyes. Irritating to the respiratory system. Irritating to the skin.

S: 26-36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Section 16: Other Information

NFPA Rating

Health: 2

Fire: 0

Reactivity: 0

HMIS Rating

Health: 2

Fire: 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 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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