

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Chloro[2-(di-tert-butylphosphino)-2',4',6'-triisopropyl-1,1'-biphenyl][2-(2-aminoethyl)phenyl]
Palladium(II)

Product Code: 5121

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

Hazard Pictograms:



Signal Word: Danger

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

Hazard Statements: H315: Causes skin irritation
H319: Causes serious eye irritation
H351: Suspected of causing cancer
H335: May cause respiratory irritation

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
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove
P402+404: Store in a dry place. Store in a closed container
P501: Dispose of contents/container in accordance with local/national/international rules.

Hazards not otherwise classified: Not applicable, none known. The toxicological properties of this material have not been fully investigated.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Chloro[2-(di-tert-butylphosphino)-2',4',6'-triisopropyl-1,1'-biphenyl][2-(2-aminoethyl)phenyl] Palladium(II)	This product is considered non-hazardous when evaluated by criteria established in the OSHA Hazard Communication Standard (29 CFR 1910.1200).	1142811-112	100
Synonyms: (t-BuXPhos) palladium(II) phenethylamine chloride[2-Di(tert-butylphosphino)-2OE,4OE,6OE -triisopropyl-1,1OE -biphenyl][2-(2-aminoethyl)phenyl]pallt-BuXPhos Palladacyclet-BuXPhos precatalyst			

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: Product is not flammable

Extinguishing In case of fire, use water fog, dry chemical, CO₂, or "alcohol" foam.

Method / Equipment:

Hazardous Constituents associated with burning / combustion are to be considered toxic. Firefighters should

Decomposition Info: 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 and clothing during clean-up. Avoid breathing dust. Ventilate area if easy to do so. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Containment **Large Spills:** Contain actively spilling material if safe and easy to do so, avoid generating dust.
Equipment and Procedures: 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 Do not handle until all safety precautions have been read and understood. Keep containers tightly

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

for Storage: Handle and store under inert gas. Air Sensitive

Incompatibilities: Store away from strong acids or oxidizing agents. Refer to Section 10.

Section 8: Exposure Control / Personal Protection

General / Use with adequate local and general exhaust ventilation.

Engineering

Controls:

Work Clothing: Protective work clothing which covers skin and prevents exposures.

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

Skin Protection: Wear chemical resistant gloves.

Respiratory Where risk assessment shows air-purifying respirators are appropriate use a full-face particle

Protection: respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Additional Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash

Information: hands or exposed skin after using the product.

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 302 - 318 °F 150 - 159 °C	Freezing Point: N/A
Color: Solid	Boiling Point/Range: N/A	pH N/A
Molecular Wt. 686.69 g/mol	Odor: None	Water Soluble
Evaporation rate: N/A	Flash Point: N/A	Solubility:
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Part. Coeff (n-octanol/water) N/A
VOC Content N/A (lbs/gal):	Viscosity: N/A	Vapor Pressure: 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: Oxidizing Agents, Strong oxidizing agents, Strong acids

Decomposition products: Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorus, Hydrogen chloride gas

Section 11: Toxicological Information

General Information: Target Organs: Kidney, Central Nervous System

Toxicological Information (product): Product has not been tested. Prolonged inhalation may be harmful to human health. Irritating in case of skin or eye contact. May be harmful if swallowed or in contact with skin.

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

Toxicological Information (contained substances)

Carcinogenicity or mutagenicity: IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (tert-Butyl methyl ether)
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

Sensitization: Product is not expected to be a sensitizer.

Other Notes: Not applicable.

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: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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

Other considerations: No further information.

Section 14: Transport Information

DOT: Non-Hazardous

IMO/IMDG: Non-Hazardous

IATA: See regulation for information

OTHER: Inquire for further transport information.

Comments: Non-Hazardous for shipping

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.

SARA Hazard: Acute Health Hazard

Classes: Chronic Health Hazard

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313: tert-Butyl methyl ether CAS-No. 1634-04-4

Canadian DSL: This product contains more than 0.1% of a known, controlled carcinogenic ingredient regulated under WHMIS

European Union (EU): R36/37/38 – Irritating to eyes, respiratory system and skin

Regulatory: S24/25 – Avoid contact with skin and eyes

Information:

State Regulations: Massachusetts Right To Know Components

tert-Butyl methyl ether CAS-No. 1634-04-4

Pennsylvania Right To Know Components

T-Buxphos palladium(II) phenethylamine chloride CAS-No. 1142811-12-8

tert-Butyl methyl ether CAS-No.1634-04-4

New Jersey Right To Know Components

T-Buxphos palladium(II) phenethylamine chloride CAS-No. 1142811-12-8

tert-Butyl methyl ether CAS-No.1634-04-4

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

NFPA Rating

Health: 2

Fire: 0

Reactivity: 0

HMIS Rating

Health: 2

Fire: 0

Reactivity: 0

Personal

Protection: F

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: John Kerchner**Version Date:** 6/15/2015