

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Dichloro(1,1-bisdiphenylphosphino) ferrocene Palladium (II) Dichloronethane Adduct

Product Code: 5086

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:

Warning

Hazard Category:

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

Hazard Statements:

H335: May cause respiratory irritation
 H315: Causes skin irritation
 H319: Causes serious eye irritation
 H332: Harmful if inhaled
 H336: May cause drowsiness or dizziness

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.
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

Hazards not otherwise classified:

Condition Aggravated by Overexposure: Methylene chloride may be a weak mutagen in mammalian systems

Condition Aggravated by Overexposure: Heart: methylene chloride is converted to carbon monoxide in the body.
 Can cause dizziness, headache, loss of consciousness and death at high concentrations.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Dichloromethane	Irritant	75-09-2	11
Dichloro(1,1-bisdiphenylphosphino) ferrocene Palladium (II) Dichloronethane Adduct	Harmful. Limited evidence of carcinogenic effect.	95464-05-4	87
Chemical Family: Palladium Chemical Formula: <chem>[(C5H4P(C6H5)2)2Fe]PdCl2(CH2Cl2)</chem>			

Section 4: First Aid Measures**General Info:**

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

symptoms:

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. 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 immediately.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Contact a physician immediately.

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. Toxic fumes can be

Decomposition Info: released: carbon monoxide, phosphorus oxides, hydrogen phosphide (phosphine), metal oxide. Firefighters should wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Personal precautions, 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 Collect material and dispose

Procedures:

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, wash spill site after pickup is complete.

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

Storage:

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

Section 8: Exposure Control / Personal Protection

General / Engineering Controls: Use with adequate local and general exhaust ventilation.

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 Protection: Utilize organic vapor respirator if airborne levels are not maintained or if ventilation is inadequate.

Additional Information:

Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed skin after using the product.

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 527-536 °F 275-280 °C	Specific Gravity: N/A
Color: Orange Powder	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 816.69	Odor: None	Water Solubility: Insoluble
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: Oxidizing Agents

Decomposition products: Carbon monoxide, carbon dioxide, hydrogen chloride gas, metal oxides, phosphorous oxides, hydrogen phosphide (phosphine)

Section 11: Toxicological Information

General Information: No data available

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: Limited evidence of carcinogenic effect

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: Dispose of product in accordance with local, regional, and national regulations. Burn in an incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Consult with a licensed professional waste contractor to dispose of this material.

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

Other considerations: 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: 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

U.S. Regulatory Information:

Confirmed carcinogen. Readily absorbed through the skin. Target organs: heart, central nervous system

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 313 This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372

State Regulations: California Prop. 65 Components: Carcinogen

Canadian DSL: This information and product has been classified in accordance with the hazard criteria of CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

European Union (EU) Symbol of Danger: Xn

Regulatory Information: Indication of Danger: Harmful

R: 20/21/22-36/37/38-40

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Limited evidence of carcinogenic effect.

S: 23-24/25-26-36/37

Do not breathe vapor. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

Section 16: Other Information

NFPA Rating

Health: 2
Fire: 0
Reactivity: 0

HMIS Rating

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

Precautionary Label: Carcinogen Irritant

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.

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