Safety Data Sheet 29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name:	Palladium(pi-cinnamyl) chloride dimer	
Prodcut Code:	5133	
CAS #: 12131-44-1		
	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: 410-398-7200 FAX Number: 410-398-2918 E-Mail : info@colonialmetals.com Web Site: www.colonialmetals.com 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 Identificati		
Hazard Pictograms:		
Signal Word:	Danger	
Hazard Category:	Serious eye damage/eye irritation Cat 1 Sensitization, resp. Cat 1 Skin corrosion/irritation Cat 2 Acute tox, inh. Cat 3	
Hazard Statements:	H318: Causes serious eye damage H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H315: Causes skin irritation H331: Toxic if inhaled	
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 P285: In case of inadequate ventilation wear respiratory protection P302+352: IF ON SKIN: Wash with soap and water P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P332+313: If skin irritation occurs: Get medical advice/attention 	
	P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician	
	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:	initiation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent	

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
3-Chloroprop-1-enyl)benzene	Flammable Liquid 4; Acute Toxicity 4; Acute Toxicity 1; Skin Corrosion 1B; Eye Damage 1;	2687-12-9	1-5%

Chemi Chemi Synony palladiu Palladi

nical Family: Platinum Group Metal Compounds nical Formula: C18H18Cl2Pd2	Respiratory Sensitivity 1; H227, H302., H314, H330, H334		
nyms: [(Cinnamyl)PdCl]2, Bis[cinnamyl lium(II) chloride], [Pd(1-phenylallyl)Cl]2, lium(1-phenylallyl)chloride dimer			

Section 4: First Aid Measures

General Info: Ensure proper ventilation. Consult a physician. Show this safety data sheet to the attending physician. Move out of dangerous area

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.
- 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.
- 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 non-combustible and acutely toxic

Extinguishing In case of fire, use water spray, dry chemical, CO2, or alcohol resistance foam.

Method / Equipment:

Hazardous Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing Decomposition Info: apparatus and full protective gear.

In case of fire, can decompose to emit toxic chlorine gas and other hazardous decomposition

Section 6: Accidental Release Measures

products

Personal precautions, Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, protective equipment sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing dust. Ventilate and procedures: 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 Contain actively spilling material if safe and easy to do so, avoid generating dust by mixing with a combustible solvent. Collect Equipment and material and dispose off using a licensed disposal company

Procedures:

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 Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant Precautions: gloves. Wash hands thoroughly after handling.

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.

Recommendations Store under an inert atmosphere in a tightly closed product container. Do not store directly on ground. Storage class (TRGS for Storage: 510): Non-combustible, acute toxic Cat. 3 / toxic hazardous material that may cause chronic effects if exposed

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

Section 8: Exposure Control / Personal Protection

General / Local Exhaust: Required in handling area

Engineering Other: Closed Ventilation system - (Laboratory Fume Hood)

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. Dispose off gloves carefully using proper technique.

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

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 218-220C	Freezing Point: N/A
Color: Yellow powder	Boiling Point/Range: N/A	pH N/A
Molecular Wt. 518.08	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 N/A (lbs/gal):	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 Strong Oxidizing agents and active metals.

materials:

Decomposition Carbon monoxide, carbon dioxide, hydrogen chloride gas products:

Section 11: Toxicological Information

General IARC/NTP/OSHA has determined that no component of this product at levels greater than or equal to 0.1% is identified as Information: probable, possible or confirmed human carcinogen.

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

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

Toxicological Information (contained substances)

Carcinogenicity or The chronic toxicological properties of this compound have not been thoroughly investigated. Unrecognized hazards may be **mutagenicity:** present.

Sensitization: Product is not expected to be a sensitizer.

Other Notes: Not applicable.

Section 12: Ecological Information

General information: Product not tested.

systems.

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

Section 13: Disposal Information

Product disposal: Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

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

Other NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information considerations: presented above incomplete, inaccurate, or otherwise inappropriate

Section 14: Transport Information

DOT: UN number: 2811 Proper shipping naaaame: T	Class:6.1 oxic solids, organic, n.o.s. ((3-Chlor	Packaging group: III roprop-1-enyl)benzene)
IMO/IMDG: UN number: 2811 Proper shipping naaaame: Tu	Class:6.1 oxic solids, organic, n.o.s. ((3-Chlor	Packaging group: III
IATA: UN number: 2811	Class:6.1 Coxic solids, organic, n.o.s. ((3-Chlor	Packaging group: III
OTHER: Inquire for further transport i		(oprop-1-enyr)benzene)

Section 15: Regulatory Information

TSCA: This product is not TSCA listed.

Issued 01/09/17 SARA 313 This product does not contain any ingredients with CAS number regulated under Section 313 of the Emergency Planning and

Community Right-To-Know Act of 1986 or 40 CFR 372

 Pennsylvania Right
 Palladium(pi-cinnamyl)chloride
 CAS #: 12131-44- (3-Chloroprop-1-enyl)benzene
 CAS #: 2687-12-9

 To Know
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Canadian DSL: All ingredients of this product comply with New Substances Notification requirements of the Canadian Environmental

	Protection Act (CEPA).
European Union	Hazard Symbols: XI
(EU) Regulatory	Risk Phrases:
Information:	R 36/38 Irritating to eyes and skin.
	Safety Phrases:
	S 24/25 Avoid contact with skin and eyes.

Section 16: Other Information

NFPA Rating	HMIS Rating
Health: 4	Health: 4
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 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 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 SDS to your customer.

Colonial Metals, Inc.

SDS Author: Colonial Metals Inc.- An Ames Goldsmith Company

Version Date:

6/7/2019