

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Methylcyclopentadienyl(trimethyl) Platinum(IV)

Product Code: 6110

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: Acute tox, oral Cat 5
 Skin corrosion/irritation Cat 3
 Serious eye damage/eye irritation Cat 3
 Aspiration hazard Cat 2

Hazard Statements: H303: May be harmful if swallowed
 H316: Causes mild skin irritation
 H320: Causes eye irritation
 H305: May be harmful if swallowed and enters airways

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
 P241: Use explosion-proof electrical/ventilating/light/.../equipment
 P264: Wash thoroughly after handling
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P302+334: IF ON SKIN: Immerse in cool water/wrap in wet bandages
 P405: Store locked up
 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:

Conditions Aggravated By Exposure:

Any respiratory condition such as asthma. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization. Platinum salts can cause a condition called Platnosis, effecting respiratory system.

Conditions Aggravated By Overexposure:

May result in pulmonary fibrosis. To the best of our knowledge, the chemical, the physical, and toxicological properties have not been thoroughly investigated.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Methylcyclopentadienyl (trimethyl) Platinum	Irritant	94442-22-5	100
Chemical Family: Platinum Group Metal Organometallic Complex Chemical Formula: C ₉ H ₁₆ Pt Synonyms: Trimethyl [(1,2,3,4,5-ETA.)-1 Methyl 2, 4-Cyclopentadien-1-YL] Platinum, Platinum Deposition			

Section 4: First Aid Measures

General Info: Irritating to respiratory tract, skin & eyes. Maybe harmful if swallowed.

Notable Exposure symptoms: 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 immediately if victim is having problems breathing.

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.

Skin contact: Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or persists.

Section 5: Fire Fighting Measures

General Info: Flash Point: 214 °F 101.1 °C

Flash Point Method: Pensky-Martens Closed Cup Procedure

Extinguishing Method / Equipment: Suitable: Water spray. Dry chemical powder, carbon dioxide, or appropriate foam

Method / Equipment:

Hazardous Decomposition Info: Firefighters should wear self-contained breathing apparatus and full protective gear. Can decompose

to emit toxic, irritating fumes of carbon monoxide, carbon dioxide and metal oxide.

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 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. Protect against electrostatic charges

Recommendations for Storage: Store in cool, dry area in a tightly closed product container away from direct sunlight/heat. Store in sealed glass container, plastic, or plastic liners, in a cool, well ventilated, dry area away from air. Store under inert gas for long term stability.

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

Section 8: Exposure Control / Personal Protection

General / Engineering Use with properly operating chemical fume hood designed for hazardous chemicals with adequate

Controls: local and general exhaust ventilation.

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 Ingredient(s) - Exposure Limits

Information: Methylcyclopentadienyl (Trimethyl) Platinum

Platinum Only::

NIOSH Exposure Limits: 0.002 mg/m3

OSHA: TWA 1 mg/m3

ACGIH: 0.002 mg/m3

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 87.8 °F 31 °C	Specific Gravity: 150 mTorr
Color: Off White or Waxy Yellow	Boiling Point/Range: Unknown	pH: N/A
Molecular Wt. 319.32	Odor: Unpleasant Odor of Organic Origin	Water Solubility: Very low solubility in H2O; Moderate in Alcohol; very soluble in organics.
Evaporation rate: N/A	Flash Point: N/A	Part. Coeff (n-octanol/water vapor): N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	Pressure: 0.053 mmHg
VOC Content (lbs/gal): N/A	Viscosity: N/A	Autoignition Temp: N/A

Pure Substance.
This is a solid but melts @ ambient temperatures
Decompose >60 C

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 and air

Decomposition products: Can decompose to emit toxic, irritating fumes of carbon monoxide, carbon dioxide and metal oxide.

Section 11: Toxicological Information

General Information: The acute oral LD-50 Study was conducted

Toxicological Acute Oral LD-50

Information (product): The test substance was evaluated for its acute oral toxicity potential in female albino rats when conducted following the UP-AND-DOWN procedure (UDP) at 17.5, 55, 550 & 1750 mg/kg. The study was terminated following the stopping rules of this procedure.

No mortality occurred at the 17.5, 55 & 550 mg/kg levels. Clinical signs in 1 or 5 survivors included activity decrease and decreased defecation on Days 7-12. Animals that died on test exhibited activity decrease, body tremors, emaciation, lacrimation, piloerection, ptosis and no feces. Animals surviving to termination exhibited weekly weight gain during the study. Abnormal necropsy findings that occurred, only in animals dying on test, pertained to anogenital area, lungs, liver, kidneys, spleen and contents of the gastrointestinal tract.

The acute oral LD-50 was estimated to be 564 mg/kg.

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: Platinum salts, especially ionic platinum halogeno complexes, may cause severe allergic reactions.

Other Notes: Any respiratory condition such as asthma. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization. Platinum salts can cause a condition called Platnosis, effecting respiratory system

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. 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: Considered non-hazardous for transport.

IMO/IMDG: Considered non-hazardous for transport. Consult regulations

IATA: Considered non-hazardous for transport. Consult regulations

OTHER: Inquire for further transport information.

Comments: None

Section 15: Regulatory Information

TSCA: All ingredients of this product are listed under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SARA 313 Acute Health Hazard

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

DSL: No

NDSL: No

European Union (EU) S: 24/25-22

Regulatory Safety Statements: Avoid contact with skin and eyes. Do not breathe dust

Information:

Section 16: Other Information

NFPA Rating

Health: 1

Fire: 1

Reactivity: 1

HMIS Rating

Health: 1

Fire: 1

Reactivity: 1

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: John Kerchner

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