

CMI Product #6011

Safety Data Sheet
29 CFR 1910.1200

Section 1: Company and Product Identification**Product Name:** Dihydrogen Hexachloroplatinum (IV) Hydrate**Product Code:** 6011

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

GHS06

GHS05

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Hazard Pictograms:**Signal Word:**

Danger

Hazard Category:

Acute tox, oral Cat 4
Acute tox, inh. Cat 4
Acute tox, dermal Cat 4
Skin corrosion/irritation Cat 2
Serious eye damage/eye irritation Cat 1
Specific target organ tox, single exp. Cat 3 (resp irrit)

Hazard Statements:

H302: Harmful if swallowed
H332: Harmful if inhaled
H312: Harmful in contact with skin
H315: Causes skin irritation
H318: Causes serious eye damage

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P264: Wash thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or
P302+352: IF ON SKIN: Wash with soap and water
P304+340: IF INHALED: 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
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P330: Rinse mouth
P332+313: If skin irritation occurs: Get medical advice/attention
P337+313: If eye irritation persists get medical advice/attention
P361: Remove/Take off immediately all contaminated clothing
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** Conditions Aggravated By Exposure**classified:** May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization. Asthma attacks may occur upon the minutest re exposure to the substance. Any respiratory condition such as asthma, may lead to platinosis from platinum compounds
Conditions Aggravated By Overexposure:

To the best of our knowledge, the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Dihydrogen Hexachloroplatinum (IV) Hydrate (Chloroplatinic Acid)	Toxic/Corrosive	26023-84-7	99 - 100
Synonyms: ACS Grade - CAS # 18497-13-7 Chloroplatinic Acid, Platinic Chloride Hydrate, Hexachloroplatinic Acid Hydrate Commercial Grade - CAS # 16941-12-1			
Chemical Name: Chloroplatinic Acid, Platinic Acid Product Name: Dihydrogen Hexachloroplatinum (IV) Hydrate Chemical Family: Platinum Group Metal Salts Chemical Formula: H ₂ PtCl ₆ .xH ₂ O			

Section 4: First Aid Measures**General Info:** Consult a physician, Show this safety data sheet to the doctor in attendance. 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 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: 5. Fire Fighting Measures****General Info:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Emits toxic fumes under fire conditions**Extinguishing** Carbon dioxide, appropriate foam or dry powder**Method /****Hazardous** Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear. Use NIOSH/MSHA approved self-contained**Info:** breathing apparatus and full protective clothing**Section 6: 6. Accidental Release Measures****Personal** Evacuate area immediately. When cleaning up wear SCBA, rubber boots, and heavy rubber gloves. Keep **precautions,** unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition **protective** sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate **equipment and** protective equipment and clothing during clean-up. Avoid breathing dust/vapors. Ventilate **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** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust. Sweep up **Equipment and** and place in a sealed container. Wash spill area after pick up is completed. Collect material and dispose **Procedures:****Cleanup** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is **Procedures:** 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 closed

Precautions: Ensure adequate ventilation. Avoid breathing dust/vapor. 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 in a dry cool place. this product is light and for **Storage:** moisture sensitive. Store under nitrogen away from sources of ignition or flame.

Incompatibilities: This product is light and moisture sensitive. Store under nitrogen

Other Precautions: .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 / Ventilation: Local Exhaust: Required in handling area

Engineering Mechanical: Desirable to insure concentration of material below TLV/TWA levels

Controls: Other: Closed ventilation system with corrosive resistant materials
Safety shower and eyewash

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

Eye/face 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 full-face particle respirator type

Protection: N((US) or type 92 (EN 143) respirator cartridges as a back up to engineering controls. If the respirators 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 Ingredient(s) - Exposure Limits:

Information: Dihydrogen Hexachloroplatinum (IV) Hydrate (Chloroplatinic Acid)
ACGIH - 0.002 MG (PT)/M3 for TWA
MSHA STANDARD -air - 0.002 MG (PT)/ M3 FOR TWA
OSHA PEL - 8 HOUR TWA 0.002 MG (PT)/M3

Section 9: Physical and Chemical Properties

State: Solid	Melting Point: 60 °C	Freezing Point: N/A
Color: Brownish-yellow to orange red deliquescent crystals	Boiling Point/Range: N/A	pH: N/A
Molecular Wt. 409.82 Anhydrous	Odor: none	Water Solubility: soluble
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: 14 mm Hg
VOC Content (lbs/gal): N/A	Specific Gravity: 2.43 G/CM3	Autoignition Temp: N/A

Section 10: Stability and Reactivity

General: Conditions To Avoid (Stability)

May decompose on exposure to light. may decompose on exposure to moist air or water. 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: Bases

Decomposition products: Hydrogen chloride and platinum oxide.

Section 11: Toxicological Information

General Information: To the best of our knowledge the chemical, physical and toxicological effects of this compound have not been thoroughly investigated.

Toxicological Information (product): Dihydrogen Hexachloroplatinum (IV) Hydrate (Chloroplatinic Acid)

Intravenous - rat - 49 mg/kg
ID 50

Remarks: Sense organs and special senses (nose, eye, ear, and taste): olfaction other changes, behavioral, tremor, gastrointestinal, hypermotility, diarrhea. Intraperitoneal

Mouse

29097 mg/kg

ID 50

Intravenous: rat

49 mg/kg

ID 50

Remarks: Sense organs and special senses (nose, eye, ear, and taste)

Olfaction: Other changes.

Behavioral: Tremor.

Gastrointestinal: Hypermotility, Diarrhea.

Intraperitoneal: mouse

29097 mg/kg

ID 50

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: Product is not expected to be a sensitizer.

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 waste contractor.

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

Other considerations: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 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: Proper Shipping Name:

Chloroplatinic acid, solid

Hazard Class:

8

DOT Identification Number:

2507

DOT Shipping Label:

Corrosive

Packaging Requirements:

PG III

IATA: Same as DOT 49 CFR. Consult IATA regulation before shipping

OTHER: Inquire for further transport information.

Comments: None

