Material Safety Data Sheet
Chloroplatinic acid MSDS

Section 1: Chemical Product and Company Identification

**Product Name:** Chloroplatinic acid

**Catalog Codes:** 10473

**CAS#:** 18497-13-7 [cas no. for hexahydrate]; 16941-12-1 [cas no. for anhydrous]

**RTECS:** TP1510000

**TSCA:** TSCA 8(b) inventory: 18497-13-7 [cas no. for hexahydrate] is not TSCA listed; 16941-12-1 [cas no. for anhydrous] is TSCA listed.

**CI#:** Not available.

**Synonym:** Dihyrogen hexachloroplatinate hexahydrate; Hexachloroplatinic acid hexahydrate; Hexachloroplatinic (4+) acid, hydrogen-, hexahydrate; Hexachloroplatinic (IV) acid hexahydrate.

**Chemical Name:** Platinate(2-), hexachloro, dihydrogen, hexahydrate

**Chemical Formula:** H2PtCl6.6H2O

**Contact Information:**

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Section 2: Composition and Information on Ingredients

**Composition:**

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<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
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<tbody>
<tr>
<td>Chloroplatinic acid</td>
<td>18497-13-7</td>
<td>100</td>
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</tbody>
</table>

**Toxicological Data on Ingredients:** Chloroplatinic acid LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

**Potential Acute Health Effects:**
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, sensitizer), of eye contact (corrosive), of inhalation (lung sensitizer). Slightly hazardous in case of skin contact (permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, mucous membranes, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions: Not applicable.
Special Remarks on Fire Hazards: Not available.
Section 6: Accidental Release Measures

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill:**
Corrosive solid. Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

**Precautions:**
Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as metals, alkalis.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**
Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**
Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**
TWA: 0.002 (mg(Pt)/m) from OSHA (PEL) [United States] TWA: 0.002 (mg(Pt)/m) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 517.9 g/mole

**Color:** Orange-brown. Red-brown.

**pH (1% soln/water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** 60°C (140°F)
Critical Temperature: Not available.
Specific Gravity: 2.431 (Water = 1)
Vapor Pressure: Not applicable.
Vapor Density: Not available.
Volatile: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: See solubility in water.
Solubility: Soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Incompatible materials
Incompatibility with various substances: Reactive with metals, alkalis.
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Reactivity:
Incompatible with cyanides and sulfides. Protect from light and moisture
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals:
LD50: Not available. LC50: Not available.
Chronic Effects on Humans: May cause damage to the following organs: lungs, mucous membranes, skin, eyes.
Other Toxic Effects on Humans:
Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, sensitizer), of eye contact (corrosive), of inhalation (lung sensitizer, lung corrosive). Slightly hazardous in case of skin contact (permeator).
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Corrosive! Skin: Causes skin burns. Eyes: Causes eye burns. Inhalation: May cause burns of the respiratory passages. Ingestion: It can cause nausea, vomiting, hypermotility, diarhea. Can burn the mouth, throat, stomach. It may affect behavior (tremors, dizziness, headache, tiredness). Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause sensitization (allergic skin reaction). Inhalation: Prolonged or repeated inhalation may cause asthma attacks in sensitized persons.

Section 12: Ecological Information
Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

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Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

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Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Chloroplatinic acid UNNA: 2507 PG: III

Special Provisions for Transport: Not available.

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Section 15: Other Regulatory Information

Federal and State Regulations:
Connecticut hazardous material survey.: Chloroplatinic acid (CAS no: 16941-12-1) New Jersey: Chloroplatinic acid (CAS no: 16941-12-1) TSCA 8(b) inventory: 18497-13-7 [cas no. for hexahydrate] is not TSCA listed; 16941-12-1 [cas no. for anhydrous] is TSCA listed.

Other Regulations:

Other Classifications:
WHMIS (Canada): CLASS E: Corrosive solid.

DSCL (EEC):
R25- Toxic if swallowed. R34- Causes burns. R42/43- May cause sensitization by inhalation and skin contact. S22- Do not breathe dust. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39- Wear suitable gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):
   Health Hazard: 3
   Fire Hazard: 0
   Reactivity: 0
   Personal Protection: j

National Fire Protection Association (U.S.A.):
   Health: 3
   Flammability: 0
   Reactivity: 0
Specific hazard:

Protective Equipment:
Gloves. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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<th>Section 16: Other Information</th>
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<td><strong>Created:</strong> 10/06/2010</td>
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