

MATERIAL SAFETY DATA SHEET**POTASSIUM CHLOROPLATINATE**

PRODUCT CODE NUMBER(S): 5930-1

PRODUCT IDENTIFICATION

Chemical Name and Synonyms: *Potassium chloroplatinate; Potassium platinum chloride; Potassium hexachloroplatinate (IV)*
Chemical Family: *Metal salt*
Chemical Formula: K_2PtCl_6
Product Use: *Laboratory reagent*
Manufacturer's Name and Address:
*Caledon Laboratories Ltd.
40 Armstrong Avenue
Georgetown, Ontario L7G 4R9*
Telephone No: (905) 877-0101
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HAZARDOUS INGREDIENTS OF MATERIALS

<i>Ingredients</i>	<i>%</i>	<i>TLV Units</i>	<i>CAS No.</i>
<i>Potassium chloroplatinate</i>	<i>>95</i>	<i>0.002 mg/m³ (as Pt)</i>	<i>16921-30-5</i>

PHYSICAL DATA

Physical State: *Solid*
Odour and Appearance: *Orange-yellow crystals or yellow powder, odourless.*
Odour Threshold (ppm): *Not applicable*
Vapour Pressure (mm Hg): *Not available*
Vapour Density (Air = 1): *Not available*
Evaporation Rate: *Not available*
Boiling Point (degrees C): *Not available*
Melting Point (degrees C): *250°C (decomposes)*
pH: *Not available*
Specific Gravity: *3.499 @ 24°C*
Coefficient of Water/Oil distribution: *Not available*

SHIPPING DESCRIPTION

UN: *Not regulated*
T.D.G. Class: *Not regulated*
Pkg. Group: *Not regulated*

REACTIVITY DATA

Chemical Stability: *Stable*
Incompatibility with other substances: *May react violently or explosively with strong oxidizing agents. Reacts explosively with bromine trifluoride.*
Reactivity: *Avoid excessive heat, ignition sources, generation of dust, incompatible materials.*
Hazardous Decomposition Products: *Hydrogen chloride and chlorine gases*

FIRE AND EXPLOSION DATA

Flammability: *Not combustible. Decomposes at high temperatures to release toxic, irritating and flammable/explosive gases.*
Extinguishing Media: *Use extinguishing media appropriate to the surrounding fire. Use water as spray or fog to minimize dust, absorb heat, cool containers, disperse vapours, and flush material away from area of fire. Fight fire from upwind, from a safe distance. Firefighters should wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes.*
Flash Point (Method Used): *Not applicable*
Autoignition Temperature: *Not applicable*
Upper Flammable Limit (% by volume): *Not applicable*
Lower Flammable Limit (% by volume): *Not applicable*
Hazardous Combustion Products: *Hydrogen chloride and chlorine gases*
Sensitivity to Impact: *None identified*
Sensitivity to Static discharge: *None identified*

TOXICOLOGICAL PROPERTIES AND HEALTH DATA

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

Toxicological Data:

LD₅₀: *Not available*
LC₅₀: *Not available*

Effects of Acute Exposure to Product:

Inhaled: *Irritating, may be harmful. No human or animal information available. Exposure to platinum salts can cause allergic respiratory reaction, with coughing, sneezing, shortness of breath, cyanosis. May cause sensitization.*
In contact with skin: *No human or animal information available. May be irritating, causing redness, itching, pain. May cause skin sensitization, dermatitis.*
In contact with eyes: *No human or animal information available. May be irritating, causing redness, tearing, pain.*
Ingested: *No human or animal information available. May be irritating and harmful.*

Effects of Chronic Exposure to Product:

Prolonged or repeated exposure may cause asthma, dermatitis, lung damage.
Carcinogenicity: *No human or animal information available.*
Teratogenicity: *No human or animal information available.*

Reproductive Effects: *No human or animal information available.*

Mutagenicity: *Inadequate information to establish mutagenicity.*

CODE: 5930-1

Synergistic Products: None known**PREVENTIVE MEASURES****Engineering Controls:** Local exhaust ventilation required**Respiratory Protection:** Dust mask. NIOSH approved respirator for concentrations above TLV. For higher or unknown concentrations, as in fire or spill conditions, positive-pressure, full face-piece self-contained breathing apparatus.**Eye Protection:** Chemical safety glasses.**Skin Protection:** Rubber or plastic gloves. Plastic apron, sleeves and other protective clothing sufficient to prevent contact.**Other Personal Protective Equipment:** Safety shower and eye-wash fountain in work area.**Leak and Spill Procedure:** Ventilate area of spill. Cleanup personnel should be trained in the handling of hazardous chemicals, and should wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes and contact with skin and eyes. Gather up in a manner that does not raise dust. Prevent from entering sewers or waterways. Transfer carefully into container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent.**Waste Disposal:** Follow all federal, provincial and local regulations for disposal. Expensive metals should be recovered for reuse or recycling if possible.**Handling Procedures and Equipment:** Workers must be thoroughly trained in the hazards of this substance and its safe use, and must wear appropriate protective equipment and clothing. Use the smallest amount possible for the purpose, in a designated area with adequate ventilation. Keep work area free of extraneous material and incompatible materials. Keep away from heat and ignition sources. Avoid raising dust. Avoid inhalation of dust or mist. Avoid contact with skin and eyes. Keep containers closed when not in use and when empty. Wash thoroughly after handling.**Storage Requirements:** Store in suitable, labelled containers, in a cool, dry, well-ventilated area, out of direct sunlight. Keep containers tightly closed when not in use and when empty. Protect from damage. Store away from incompatible materials.**FIRST AID MEASURES****Specific Measures:****Eyes:** Flush eyes thoroughly with gently running water, holding eyelids open while flushing, for five to ten (5-10) minutes, or until no trace of chemical remains. Take care not to flush contaminated water into unaffected eye. If irritation persists, get medical attention.**Skin:** Remove contaminated clothing. Brush or wipe off dry material. Wash skin with plenty of water until no evidence of chemical remains. If irritation develops get medical attention. Decontaminate clothing before reuse, or discard.**Inhalation:** Remove to fresh air. Give oxygen and get medical attention for any breathing difficulty.**Ingestion:** If the victim is alert and not convulsing, rinse mouth thoroughly with water and give 2 to 4 glasses of water to drink to dilute. If victim feels unwell, or if a large amount has been ingested, get medical attention.**REFERENCES USED***Budavari: The Merck Index, 12th ed., 1997**Sax, Lewis: Hawley's Condensed Chemical Dictionary, 11th ed., 1987**Sax: Dangerous Properties of Industrial Materials, 5th ed., 1979**Suppliers' Material Safety Data Sheets***ADDITIONAL INFORMATION****Date Issued:** July 22, 1991**Revision:** June 2010**MSDS:** 5930-1**Proposed WHMIS Designation:** Insufficient information available

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