

Material Safety Data Sheet

<p>NFPA</p> 	<p>HMIS</p> <table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	<p>Personal Protective Equipment</p>  <p style="text-align: center;">See Section 15.</p>
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1										
Common Name/ Trade Name	Potassium hexachloroplatinate (IV)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Catalog Number(s).</td> <td>P1311</td> </tr> <tr> <td>CAS#</td> <td>16921-30-5</td> </tr> <tr> <td>RTECS</td> <td>TP1650000</td> </tr> <tr> <td>TSCA</td> <td>TSCA 8(b) inventory: Potassium hexachloroplatinate (IV)</td> </tr> <tr> <td>CI#</td> <td>Not available.</td> </tr> </table>	Catalog Number(s).	P1311	CAS#	16921-30-5	RTECS	TP1650000	TSCA	TSCA 8(b) inventory: Potassium hexachloroplatinate (IV)	CI#	Not available.
Catalog Number(s).	P1311											
CAS#	16921-30-5											
RTECS	TP1650000											
TSCA	TSCA 8(b) inventory: Potassium hexachloroplatinate (IV)											
CI#	Not available.											
Manufacturer	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<p style="text-align: center;"><u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u></p> <p style="text-align: center;">CALL (310) 516-8000</p>										
Commercial Name(s)	Not available.											
Synonym	Platinate(2-), hexachloro-, dipotassium Dipotassium hexachloroplatinate Dipotassium platinum hexachloride Platinic potassium chloride Potassium chloroplatinate Potassium platinic chloride											
Chemical Name	Platinate(2-), hexachloro-, potassium (1:2)											
Chemical Family	Not available.											
Chemical Formula	K ₂ PtCl ₆											
Supplier	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248											

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Potassium hexachloroplatinate (IV)	16921-30-5	0.002			100
Toxicological Data on Ingredients					
<p>Potassium hexachloroplatinate (IV) LD50: Not available. LC50: Not available.</p>					

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant), of ingestion, of inhalation (lung sensitizer). Severe over-exposure can result in death.

Potential Chronic Health Effects	<p>Slightly hazardous in case of skin contact (sensitizer).</p> <p>CARCINOGENIC EFFECTS: Not available.</p> <p>MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Not available.</p> <p>The substance may be toxic to kidneys, lungs, liver, upper respiratory tract, skin.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.</p>
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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.
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.
Serious Inhalation	Not available.
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	<p>Risks of explosion of the product in presence of mechanical impact: Not available.</p> <p>Risks of explosion of the product in presence of static discharge: Not available.</p>
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	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. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. 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. Wear suitable protective clothing. 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.
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. Lab coat. 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. 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/m ³) (as Pt) from ACGIH (TLV) [United States] TWA: 0.002 (mg/m ³) (as Pt) from OSHA (PEL) [United States] TWA: 0.002 STEL: 0.006 (mg/m ³) (as Pt) [Canada] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystalline solid. Powdered solid.)	Odor	Not available.
Molecular Weight	485.99 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Orange-Yellow. Yellow.
Boiling Point	Not available.		
Melting Point	Decomposes.		
Critical Temperature	Not available.		
Specific Gravity	3.5 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	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 hot water. Slightly soluble in cold water Solubility in Water: 0.77g/100g water @ 20 deg. C.; 5.22% @ 100 deg. C. Insoluble in Ethanol..
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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials, dust generation
Incompatibility with various substances	Reactive with oxidizing agents, metals, acids.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract, skin.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung sensitizer).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization and allergic skin reaction upon repeated contact. Eyes: Causes eye irritation. Risk of serious damage to eyes. Inhalation: Causes respiratory tract irritation. May cause allergic inhalation reactions such as allergic rhinitis, bronchitis with sneezing, runny eyes, and coughing. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea. Chronic exposure by skin contact may cause allergic contact dermatitis Chronic exposure by inhalation may cause allergic reaction such as asthma with symptoms of cough, tightness of the chest, wheezing, and shortness of breath.

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.

Section 13. Disposal Considerations

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

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations Minnesota: Potassium hexachloroplatinate (IV)
TSCA 8(b) inventory: Potassium hexachloroplatinate (IV)

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

WHMIS (Canada) CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC)

R25- Toxic if swallowed.	S22- Do not breathe dust.
R41- Risk of serious damage to eyes.	S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
R42/43- May cause sensitization by inhalation and skin contact.	S36/37/39- Wear suitable protective clothing, 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	2
Fire Hazard	0
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)

Health  Flammability
Reactivity
Specific hazard

WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada)
(Pictograms)



ADR (Europe)
(Pictograms)



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information

MSDS Code P4345

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 11/1/2011.

Verified by Sonia Owen.

Printed 11/1/2011.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.