



### SECTION 1: Product Identification

Chemical Name:	Platinum (IV) chloride (99.9%-Pt)
Product Number:	213
CAS Registry Number:	13454-96-1
Formula:	PtCl <sub>4</sub>
EINECS Number:	236-645-1
Chemical Family:	metal halide
Synonym:	Platinum tetrachloride, tetrachloroplatinum, platinum chloride

### SECTION 2: Composition and Information on Ingredients

Ingredient	CAS Number	Percent	ACGIH (TWA)	OSHA (PEL)
Title Compound	13454-96-1	100	0.002mg/m <sup>3</sup>	0.002mg/m <sup>3</sup>

### SECTION 3: Hazards Identification

Emergency Overview:	Exposure to platinum salts has been shown to cause wheezing, coughing, shortness of breath and running of the nose. Harmful if swallowed. Causes burns. Skin contact can lead to dermatitis.
Primary Routes of Exposure:	Ingestion, skin, inhalation of dust
Eye Contact:	Causes burns to the eyes.
Skin Contact:	Causes slight burns to the skin. May cause dermatitis. Can induce an allergic reaction.
Inhalation:	Inhalation of dust may cause wheezing, coughing, shortness of breath and asthma like symptoms. Causes burns to the respiratory tract.
Ingestion:	Ingestion may lead to dizziness, abdominal cramps, and vomiting. Harmful if swallowed.
Acute Health Effects:	Upon repeated exposure certain persons may develop an allergic reaction to chloroplatinates, causing wheezing, coughing, shortness of breath and runny nose. Causes burns. Harmful if swallowed.
Chronic Health Effects:	The chloroplatinate allergic reaction known as platinosis ceases when exposure is terminated. No permanent long term effects are reported. May cause heritable genetic damage.



NTP:	No
IARC:	No
OSHA:	No
<b>SECTION 4: First Aid Measures</b>	
Eye Exposure:	Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.
Skin Exposure:	Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.
Inhalation:	Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
Ingestion:	Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.
<b>SECTION 5: Fire Fighting Measures</b>	
Flash Point:	not applicable
Autoignition Temperature:	none
Explosion Limits:	none
Extinguishing Medium:	None. Material is non-flammable.
Special Fire Fighting Procedures:	No special fire fighting procedures required.
Hazardous Combustion and Decomposition Products:	If involved in a fire this material may emit toxic fumes of chlorine gas and hydrogen chloride.
Unusual Fire or Explosion Hazards:	No unusual fire or explosion hazards.
<b>SECTION 6: Accidental Release Measures</b>	



Spill and Leak Procedures:	To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.
<b>SECTION 7: Handling and Storage</b>	
Handling and Storage:	Store solid in a tightly sealed container away from moisture. Handle under a dry atmosphere of air or nitrogen. Prolonged exposure to the atmosphere may degrade the product.
<b>SECTION 8: Exposure Controls and Personal Protection</b>	
Eye Protection:	Always wear approved safety glasses when handling a chemical substance in the laboratory.
Skin Protection:	Wear protective clothing and gloves. Consult with glove manufacturer to determine the proper type of glove.
Ventilation:	Material may form a fine dust. If possible, handle the material in an efficient fume hood.
Respirator:	If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.
Additional Protection:	No additional protection required.
<b>SECTION 9: Physical and Chemical Properties</b>	
Color and Form:	reddish-brown xtl.
Molecular Weight:	336.9
Melting Point:	370°C dec.
Boiling Point:	no data
Vapor Pressure:	not applicable
Specific Gravity:	4.303
Odor:	none
Solubility in Water:	insoluble
<b>SECTION 10: Stability and Reactivity</b>	
Stability:	moisture sensitive
Hazardous	no hazardous polymerization



Polymerization:

Conditions to Avoid: contact with moisture

Incompatibility: oxidizing agents and active metals

Decomposition Products: Chloroplatinic acid, platinum dichloride, hydrogen chloride, chlorine

### SECTION 11: Toxicological Information

RTECS Data: Administration onto the skin (rabbit); Standard Draize test: 100 mg/24H. Oral (rat); LD50: 276 mg/kg. Intratesticular (rat); TDLo: 20951 ug/kg. Subcutaneous (mouse); TDLo: 26951 ug/kg. Bacteria-Salmonella typhimurim; Mutation in microorganisms: 100 ng/disc. Bacteria-Escherichia coli; Mutation test systems-not otherwise specified: 100 umol/L. Bacteria-Bacillus subtilis; DNA repair: 1 mmol/L. Oral (insect-Drosophila melanogaster); Sex chromosome loss and nondisjunction: 300 umol/L/72H. Human Lymphocyte; Micronucleus test: 20 umol/L. Human Lung; DNA inhibition: 2300 ug/L. Intraperitoneal (rat); DNA inhibition: 28 umol/kg.

Carcinogenic Effects: no data

Mutagenic Effects: Mutagen

Teratogenic Effects: Insufficient data

### SECTION 12: Ecological Information

Ecological Information: No information available

### SECTION 13: Disposal Considerations

Disposal: Dispose of according to local, state and federal regulations.

### SECTION 14: Transportation

Shipping Name (CFR): Corrosive solid, Acidic, Inorganic, N.O.S.

Hazard Class (CFR): 8

Additional Hazard Class (CFR): NA

Packaging Group (CFR): III



UN ID Number (CFR):	UN# 3260
Shipping Name (IATA):	Corrosive solid, Acidic, Inorganic, N.O.S.
Hazard Class (IATA):	2
Additional Hazard Class (IATA):	NA
Packaging Group (IATA):	III
UN ID Number (IATA):	UN# 3260

#### SECTION 15: Regulatory Information

TSCA:	Listed in the TSCA inventory.
SARA (Title 313):	Title compound not listed.
Second Ingredient:	none
Third Ingredient:	none