

Printing date 19.07.2021 Revision: 19.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

· Item number: 78-1970

• CAS Number: 10025-99-7 • EC number: 233-050-9

• Index number: 078-004-00-7

· 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Strem Chemicals, Inc.

7 Mulliken Way

NEWBURYPORT, MA 01950

USA

info@strem.com

· Further information obtainable from: Technical Department

· 1.4 Emergency telephone number:

EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

(Contd. of page 1)



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

· Hazard pictograms







GHS06

· **Signal word** Danger

· Hazard-determining components of labelling:

dipotassium tetrachloroplatinate

· Hazard statements

H301 Toxic if swallowed. H315 Causes skin irritation.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P422 Store contents under inert gas.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances

· CAS No. Description

10025-99-7 dipotassium tetrachloroplatinate

· Identification number(s)

· EC number: 233-050-9

· Index number: 078-004-00-7

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)



Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

(Contd. of page 2)

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: No special measures required.
- · 6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- · Handling: Handle under inert gas.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage: Store contents under inert gas.
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 4)



Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

(Contd. of page 3)

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

10025-99-7 dipotassium tetrachloroplatinate

WEL Long-term value: 0.002 mg/m³

as Pt; Sen

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Powder
Colour: Pink

Odour: Odourless

Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/freezing point: 250 °C **Initial boiling point and boiling range:** Undetermined.

· Flash point: Not applicable.

(Contd. on page 5)



Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

	(Contd. of pag
· Flammability (solid, gas):	Not determined.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable.
Density at 20 °C:	3.38 g/cm^3
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
water:	Insoluble.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0 %
VOC (EC)	0.00 %
Solids content:	100.0 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Toxic if swallowed.

- · Primary irritant effect:
- · Skin corrosion/irritation
- Causes skin irritation.
- · Serious eye damage/irritation

Causes serious eye damage.

(Contd. on page 6)

(Contd. of page 5)



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

· Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Must not reach sewage water or drainage ditch undiluted or unneutralised.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · **Recommendation:** Disposal must be made according to official regulations.

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- · 14.1 UN-Number
- UN3288 · ADR, IMDG, IATA
- · 14.2 UN proper shipping name
- $\cdot ADR$ 3288 TOXIC SOLID, INORGANIC, N.O.S. TOXIC SOLID, INORGANIC, N.O.S. · IMDG, IATA
- · 14.3 Transport hazard class(es)
- · ADR, IMDG



Class

(Contd. on page 7)



Printing date 19.07.2021 Revision: 19.07.2021

Trade name: Potassium tetrachloroplatinate(II) (99.9%-Pt)

	(Contd. of page
· Label	6.1
· IATA	
· Class	6.1 Toxic substances.
· Label	6.1
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· EMS Number:	F- A , S - A
· Stowage Category	A
· 14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.
· Transport/Additional information:	
· <i>ADR</i>	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· IMDG	
· Limited quantities (LQ)	5kg
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· UN ''Model Regulation'':	UN 3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category H2 ACUTE TOXIC
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director

(Contd. on page 8)



Printing date 19.07.2021 Revision: 19.07.2021

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(Contd. of page 7)

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1