

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Heraeus

Potassium Tetrachloro-Pt(II) HSTDP

Version
7.0

Revision Date:
04.08.2020

Date of last issue: 12.08.2019
Date of first issue: 26.11.2015

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

1.1 Product identifier

Trade name : Potassium Tetrachloro-Pt(II) HSTDP
Product code : 81147414
REACH Registration Number : 01-2120751200-72-0000
Company : Heraeus Deutschland GmbH & Co. KG

Heraeus companies not listed here do not have a REACH registration, because the companies either are located outside the EU or they are not required to register due to the annual amount of produced/imported substance.

Substance name : dipotassium tetrachloroplatinate
CAS-No. : 10025-99-7
Index-No. : 078-004-00-7
EC-No. : 233-050-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Industrial use

1.3 Details of the supplier of the safety data sheet

Company : Heraeus Deutschland GmbH & Co. KG
Heraeusstr. 12-14
63450 Hanau
Telephone : +496181351
E-mail address of person responsible for the SDS : sds@heraeus.com
(Heraeus Holding: EHS Chemical Safety)

1.4 Emergency telephone number

Emergency telephone number : +49 6132-84463
International Emergency Number
This telephone number is available 24 hours per day, 7 days per week.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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Acute toxicity, Category 3
Skin irritation, Category 2
Serious eye damage, Category 1
Respiratory sensitisation, Category 1

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.

Skin sensitisation, Category 1

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H301 Toxic if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical nature : inorganic

Chemical name	CAS-No. EC-No. Index-No.	Concentration (% w/w)

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dipotassium tetrachloroplatinate	10025-99-7 233-050-9 078-004-00-7	100
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SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : First aider needs to protect himself.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
Get medical attention.
- In case of skin contact : Take off all contaminated clothing immediately.
Obtain medical attention.
Wash off with soap and plenty of water.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Keep eye wide open while rinsing.
Protect unharmed eye.
Call a physician immediately.
- If swallowed : Immediately give large quantities of water to drink.
Do NOT induce vomiting.
Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Risks : Toxic if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Exposure to decomposition products may be a hazard to health.

Hazardous combustion products : Halogens
Hydrogen chloride
Metal oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information : Use a water spray to cool fully closed containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Follow safe handling advice and personal protective equipment recommendations.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.
Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.
Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Wear personal protective equipment.
Avoid inhalation, ingestion and contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.

Hygiene measures : Keep away from food and drink. Wash hands before breaks and at the end of workday. Keep working clothes separately.

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Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class (TRGS 510) : 6.1C, Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

Remarks : Before removing gloves clean them with soap and water. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Filter type ABEK-P

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : powder
Colour : red brown
Odour : odourless

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Odour Threshold	:	Not relevant
pH	:	Not applicable
Melting point/range	:	Not applicable
Boiling point/boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available
Density	:	3,4 g/cm ³ (23 °C, 1.013 hPa)
Solubility(ies)		
Water solubility	:	10 g/l soluble (20 °C, 1.013 hPa)
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	200 °C
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
		Not applicable
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

Self-ignition : No data available

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SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Toxic if swallowed.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

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

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

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STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

dipotassium tetrachloroplatinate:

Partition coefficient: n- : Remarks: Not applicable
octanol/water

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

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ADN : UN 2923
ADR : UN 2923
RID : UN 2923
IMDG : UN 2923
IATA : UN 2923

14.2 UN proper shipping name

ADN : CORROSIVE SOLID, TOXIC, N.O.S.
(Potassium tetrachloroplatinate(II))
ADR : CORROSIVE SOLID, TOXIC, N.O.S.
(Potassium tetrachloroplatinate(II))
RID : CORROSIVE SOLID, TOXIC, N.O.S.
(Potassium tetrachloroplatinate(II))
IMDG : CORROSIVE SOLID, TOXIC, N.O.S.
(Potassium tetrachloroplatinate(II))
IATA : Corrosive solid, toxic, n.o.s.
(Potassium tetrachloroplatinate(II))

14.3 Transport hazard class(es)

ADN : 8
ADR : 8
RID : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADN
Packing group : III
Classification Code : CT2
Hazard Identification Number : 86
Labels : 8 (6.1)

ADR
Packing group : III
Classification Code : CT2
Hazard Identification Number : 86
Labels : 8 (6.1)
Tunnel restriction code : (E)

RID
Packing group : III
Classification Code : CT2
Hazard Identification Number : 86
Labels : 8 (6.1)

IMDG
Packing group : III

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Labels : 8 (6.1)
EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo aircraft) : 864
Packing instruction (LQ) : Y845
Packing group : III
Labels : Corrosive, Toxic

IATA (Passenger)

Packing instruction (passenger aircraft) : 860
Packing instruction (LQ) : Y845
Packing group : III
Labels : Corrosive, Toxic

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable
REACH - List of substances subject to authorisation (Annex XIV) : Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable
Regulation (EC) No 649/2012 of the European Parlia- : Not applicable

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ment and the Council concerning the export and import of dangerous chemicals

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

H2 ACUTE TOXIC

Water contaminating class : WGK 3 highly hazardous to water
(Germany) Classification according to AwSV, Annex 1 (4)

Other regulations:

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No

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1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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