

## SAFETY DATA SHEET

Creation Date 12-Oct-2010

Revision Date 19-Jan-2018

Revision Number 3

### 1. Identification

**Product Name** Potassium tetrachloroplatinate(II)  
**Cat No. :** AC195360000; AC195360010; AC195360050; AC195360250  
**CAS-No** 10025-99-7  
**Synonyms** Potassium platinochloride; Platinous potassium chloride; Potassium chloroplatinite  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |            |
|--|------------|
| Acute oral toxicity                              | Category 3 |
| Skin Corrosion/irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 1 |
| Respiratory Sensitization                        | Category 1 |
| Skin Sensitization                               | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system.              |            |

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

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



### Precautionary Statements

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 In case of inadequate ventilation wear respiratory protection  
 Contaminated work clothing should not be allowed out of the workplace  
 Use only outdoors or in a well-ventilated area

#### Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention

#### Eyes

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 or doctor/physician

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth

#### Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None identified

## 3. Composition/Information on Ingredients

| Component                          | CAS-No     | Weight % |
|------------------------------------|------------|----------|
| Potassium tetrachloroplatinate(II) | 10025-99-7 | >95      |

## 4. First-aid measures

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
 Immediate medical attention is required.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

#### Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

#### Ingestion

Do not induce vomiting. Call a physician or Poison Control Center immediately.

|  |  |
|--|--|
| <b>Most important symptoms and effects</b> | Causes eye burns. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. . Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing |
| <b>Notes to Physician</b>                  | Treat symptomatically  |

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available  
**Method -** No information available

**Autoignition Temperature**

**Explosion Limits**

**Upper** No data available  
**Lower** No data available  
**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

This material poses an explosion hazard. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

### Hazardous Combustion Products

Hydrogen chloride gas Platinum oxide

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 1                   | 0                  | N/A                     |

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

**Environmental Precautions** Avoid release to the environment.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

## 7. Handling and storage

**Handling** Use only under a chemical fume hood. Wear personal protective equipment. Avoid dust formation. Do not breathe vapors/dust. Do not get in eyes, on skin, or on clothing. Do not ingest.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component                          | ACGIH TLV                    | OSHA PEL                               | NIOSH IDLH  | Mexico OEL (TWA)             |
|------------------------------------|------------------------------|--|---|------------------------------|
| Potassium tetrachloroplatinate(II) | TWA: 0.002 mg/m <sup>3</sup> | (Vacated) TWA: 0.002 mg/m <sup>3</sup> | IDLH: 4 mg/m <sup>3</sup><br>TWA: 0.002 mg/m <sup>3</sup> | TWA: 0.002 mg/m <sup>3</sup> |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|   |                                   |
|---|-----------------------------------|
| <b>Physical State</b>                         | Solid                             |
| <b>Appearance</b>                             | Red brown                         |
| <b>Odor</b>                                   | Odorless                          |
| <b>Odor Threshold</b>                         | No information available          |
| <b>pH</b>                                     | 4-5 10 g/L aq.sol                 |
| <b>Melting Point/Range</b>                    | 250 °C / 482 °F                   |
| <b>Boiling Point/Range</b>                    | No information available          |
| <b>Flash Point</b>                            | No information available          |
| <b>Evaporation Rate</b>                       | Not applicable                    |
| <b>Flammability (solid,gas)</b>               | No information available          |
| <b>Flammability or explosive limits</b>       |                                   |
| <b>Upper</b>                                  | No data available                 |
| <b>Lower</b>                                  | No data available                 |
| <b>Vapor Pressure</b>                         | No information available          |
| <b>Vapor Density</b>                          | Not applicable                    |
| <b>Specific Gravity</b>                       | 3.499                             |
| <b>Solubility</b>                             | 10 g/L (20°C)                     |
| <b>Partition coefficient; n-octanol/water</b> | No data available                 |
| <b>Autoignition Temperature</b>               |                                   |
| <b>Decomposition Temperature</b>              | 250 °C                            |
| <b>Viscosity</b>                              | Not applicable                    |
| <b>Molecular Formula</b>                      | Cl <sub>4</sub> K <sub>2</sub> Pt |
| <b>Molecular Weight</b>                       | 415.1                             |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactive Hazard</b>                  | None known, based on information available                |
| <b>Stability</b>                        | Stable under normal conditions.                           |
| <b>Conditions to Avoid</b>              | Incompatible products. Excess heat. Avoid dust formation. |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Acids                            |
| <b>Hazardous Decomposition Products</b> | Hydrogen chloride gas, Platinum oxide                     |

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

**Component Information**

**Toxicologically Synergistic** No information available

**Products**

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Severe eye irritant, Irritating to skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                          | CAS-No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------------------------|------------|------------|------------|------------|------------|------------|
| Potassium tetrachloroplatinate(II) | 10025-99-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability** May persist based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

UN-No UN3288  
 Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.  
 Proper technical name Potassium tetrachloroplatinate(II)  
 Hazard Class 6.1  
 Packing Group III

**TDG**

UN-No UN3288  
 Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S.  
 Hazard Class 6.1  
 Packing Group III

**IATA**

UN-No UN3288  
 Proper Shipping Name Toxic solid, inorganic, n.o.s  
 Hazard Class 6.1  
 Packing Group III

**IMDG/IMO**

UN-No UN3288  
 Proper Shipping Name Toxic solid, inorganic, n.o.s  
 Hazard Class 6.1  
 Packing Group III

## 15. Regulatory information

**International Inventories**

| Component                          | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Potassium tetrachloroplatinate(II) | X    | X   | -    | 233-050-9 | -      |     | X     | X    | X    | X     | X    |

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA Occupational Safety and Health Administration**  
Not applicable

**CERCLA** Not applicable

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Component                          | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------------------------|---------------|------------|--------------|----------|--------------|
| Potassium tetrachloroplatinate(II) | -             | -          | X            | -        | X            |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico - Grade**

No information available

**16. Other information****Prepared By**

Regulatory Affairs  
 Thermo Fisher Scientific  
 Email: EMSDS.RA@thermofisher.com

**Creation Date**

12-Oct-2010

**Revision Date**

19-Jan-2018

**Print Date**

19-Jan-2018

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

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

**End of SDS**