

# SAFETY DATA SHEET

Creation Date 10-Mar-2010

Revision Date 19-Dec-2025

Revision Number 8

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** Potassium hexachloroplatinate(IV)

**Cat No. :** AC195350000; AC195350010; AC195350050; AC195350250

**CAS No** 16921-30-5  
**Synonyms** Potassium chloroplatinate

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

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

#### Company

Fisher Scientific Company  
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: 001-800-227-6701 / **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 according to [US] OSHA (29 CFR 1910.1200, 2024)

|  |            |
|--|------------|
| Corrosive to metals                                  | Category 1 |
| Acute oral toxicity                                  | Category 3 |
| Serious Eye Damage/Eye Irritation                    | Category 1 |
| Respiratory Sensitization                            | Category 1 |
| Skin Sensitization                                   | Category 1 |
| Specific target organ toxicity - (repeated exposure) | Category 1 |

### Label Elements

**Signal Word**  
Danger

**Hazard Statements**

May be corrosive to metals  
Toxic if swallowed  
May cause an allergic skin reaction  
Causes serious eye damage  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
Causes damage to organs through prolonged or repeated exposure

**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  
In case of inadequate ventilation wear respiratory protection  
Contaminated work clothing should not be allowed out of the workplace  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep only in original packaging

**Response**

Get medical attention/advice if you feel unwell

**Inhalation**

If experiencing respiratory symptoms: Call a POISON CENTER or doctor  
IF INHALED: Remove person to fresh air and keep comfortable for breathing

**Skin**

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

**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  
Rinse mouth

**Spills**

Absorb spillage to prevent material damage

**Storage**

Store locked up  
Store in corrosive resistant polypropylene container with a resistant liner

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available

### 3. Composition/information on Ingredients

| Component                         | CAS No     | Weight % |
|-----------------------------------|------------|----------|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | <=100    |

#### 4. First-aid measures

|  |   |
|--|---|
| <b>General Advice</b>                      | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.   |
| <b>Eye Contact</b>                         | In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.   |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.   |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. 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.                            |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Call a physician or poison control center immediately.  |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable. Causes severe eye damage. 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

|   |                          |
|---|--------------------------|
| <b>Unsuitable Extinguishing Media</b>   | No information available |
| <b>Flash Point</b>                      | No information available |
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | No information available |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

##### Specific Hazards Arising from the Chemical

After use: spent catalysts may become explosive. Risk of ignition. Do not allow run-off from fire-fighting to enter drains or water courses.

##### Hazardous Combustion Products

Chlorine. Platinum oxide. Hydrogen chloride gas.

##### 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. Thermal decomposition can lead to release of irritating gases and vapors.

##### NFPA

**Health**  
3

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

#### 6. Accidental release measures

|                                  |   |
|----------------------------------|---|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. |
| <b>Environmental Precautions</b> | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities         |

should be advised if significant spillages cannot be contained. Should not be released into the environment.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and Storage

**Handling** Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Metals.

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component                         | ACGIH TLV                    | OSHA PEL                               | NIOSH  | Mexico OEL (TWA)             |
|-----------------------------------|------------------------------|--|--|------------------------------|
| Potassium hexachloroplatinate(IV) | 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>REL = 0.002 mg/m <sup>3</sup> (TWA) | TWA: 0.002 mg/m <sup>3</sup> |

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and 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

|                                 |   |
|---------------------------------|---|
| <b>Eye/face Protection</b>      | 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. Tight sealing safety goggles.   |
| <b>Skin and body protection</b> | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| <b>Respiratory Protection</b>   | 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. |
| <b>Recommended Filter type:</b> | Particulates filter conforming to EN 143.   |
| <b>Hygiene Measures</b>         | Handle in accordance with good industrial hygiene and safety practice.  |

## 9. Physical and chemical properties

### Appearance

**Physical State**

**Color**

**Odor**

**Odor Threshold**

**Property**

**Melting Point/Range**

**Softening Point**

**Boiling Point/Range**

Solid

Yellow-orange

No information available

No information available

**Values**

250 °C / 482 °F

No data available

No information available

**Remarks**

**• Method**

|  |                                   |  |
|--|-----------------------------------|--|
| <b>Flash Point</b>                             | No information available          | <b>Method</b> - No information available |
| <b>Flammability (liquid)</b>                   | Not applicable                    | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available          |  |
| <b>Explosion Limits</b>                        | No data available                 |  |
| <b>Autoignition Temperature</b>                | No data available                 |  |
| <b>Decomposition Temperature</b>               | 250 °C                            |  |
| <b>pH</b>                                      | No information available          |  |
| <b>Viscosity</b>                               | Not applicable                    | Solid                                    |
| <b>Water Solubility</b>                        | 50 g/l (95°C)                     |  |
| <b>Solubility in other solvents</b>            | No information available          |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                                   |  |
| <b>Vapor Pressure</b>                          | No data available                 |  |
| <b>Density / Specific Gravity</b>              | No data available                 |  |
| <b>Bulk Density</b>                            | No data available                 |  |
| <b>Vapor Density</b>                           | Not applicable                    | Solid                                    |
| <b>Particle characteristics</b>                | No data available                 |  |
| <b>Other Information</b>                       |                                   |  |
| <b>Molecular Formula</b>                       | Cl <sub>6</sub> K <sub>2</sub> Pt |  |
| <b>Molecular Weight</b>                        | 486.01                            |  |
| <b>Evaporation Rate</b>                        | Not applicable - Solid            |  |

## 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.             |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Metals                 |
| <b>Hazardous Decomposition Products</b> | Chlorine, Platinum oxide, Hydrogen chloride gas |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.        |
| <b>Hazardous Reactions</b>              | None under normal processing.                   |

## 11. Toxicological information

### Information on expected route of exposure

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | Not an expected route of exposure.  |
| <b>Ingestion</b>  | May be harmful if swallowed.  |
| <b>Eyes</b>       | Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness. |
| <b>Skin</b>       | Avoid contact with skin. Skin Corrosion/Irritation.   |

### Toxicology data for the components

| Component                         | LD50 Oral       | LD50 Dermal | LC50 Inhalation |
|-----------------------------------|-----------------|-------------|-----------------|
| Potassium hexachloroplatinate(IV) | 195 mg/kg (Rat) | -           | -               |

|   |                          |
|---|--------------------------|
| <b>Toxicologically Synergistic Products</b> | No information available |
|---|--------------------------|

|                                       |                   |
|---------------------------------------|-------------------|
| <b>(b) skin corrosion/irritation;</b> | No data available |
|---------------------------------------|-------------------|

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory

Category 1

Skin

Category 1

No information available

(e) germ cell mutagenicity;

No data available

(f) carcinogenicity;

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

| Component                         | CAS No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

(g) reproductive toxicity;

No data available

(h) STOT-single exposure;

No data available

(i) STOT-repeated exposure;

Category 1

Target Organs

None known.

(j) aspiration hazard;

Not applicable  
Solid

**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.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties**

This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

**Persistence and Degradability**

based on information available. May persist

**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** UN2923  
**Proper Shipping Name** CORROSIVE SOLIDS, TOXIC, N.O.S.  
**Technical Shipping Name** Potassium chloroplatinate  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

**TDG**

**UN-No** UN2923  
**Proper Shipping Name** CORROSIVE SOLID, TOXIC, N.O.S.  
**Technical Shipping Name** Potassium chloroplatinate  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

**IATA**

**UN-No** UN2923  
**Proper Shipping Name** CORROSIVE SOLID, TOXIC, N.O.S.  
**Technical Shipping Name** Potassium chloroplatinate  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

**IMDG/IMO**

**UN-No** UN2923  
**Proper Shipping Name** CORROSIVE SOLID, TOXIC, N.O.S.  
**Technical Shipping Name** Potassium chloroplatinate  
**Hazard Class** 8  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

## 15. Regulatory Information

**United States of America Inventory**

| Component                         | CAS No     | TSCA | TSCA Inventory notification -<br>Active-Inactive | TSCA - EPA Regulatory<br>Flags |
|-----------------------------------|------------|------|--|--------------------------------|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | X    | ACTIVE   | -                              |

**Legend:**

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical  
Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

**International Inventories**

X = listed.

| Component                         | CAS No     | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|-----------------------------------|------------|-----|------|-----------|-------|------|------|------|-------|----------|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | X   | -    | 240-979-3 | X     | X    | X    | X    | X     | KE-12155 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)**U.S. Federal Regulations**

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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

**Clean Air Act** Not applicable

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

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**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 hexachloroplatinate(IV) | -             | -          | 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

**Authorisation/Restrictions according to EU REACH**

| Component                         | CAS No     | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|-----------------------------------|------------|---|---|---|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | -   | Use restricted. See entry 75.<br>(see link for restriction details)           | -   |

**REACH links**

<https://echa.europa.eu/substances-restricted-under-reach>

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



| Component                         | CAS No     | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-----------------------------------|------------|----------------|------------------------------|---------------------------|--|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

#### Other International Regulations

| Component                         | CAS No     | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------------------------------|------------|---|--|----------------------------|------------------------------------|
| Potassium hexachloroplatinate(IV) | 16921-30-5 | Not applicable  | Not applicable   | Not applicable             | Not applicable                     |

## 16. Other Information

**Prepared By**

Product stewardship (Regulatory Affairs)  
Thermo Fisher Scientific  
email - begel.sdsdesk@thermofisher.com

**Creation Date**

10-Mar-2010

**Revision Date**

19-Dec-2025

**Print Date**

19-Dec-2025

**Revision Summary**

Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

#### 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**