

SAFETY DATA SHEET

fluorochem.

1. Identification of Substance / Mixture

Product Identifier

1.1.2 Product Name	Sodium hexachloroplatinate(IV) hexahydrate
1.1.2 Other Names	
1.1.1 Product Code	F544873
1.1.3 CAS	19583-77-8
1.1.4 MDL	MFCD00149172
1.1.5 EINECS	626-326-9
1.1.6 REACH Registration Number	
1.2.1 Relevant Uses	For research and development purposes.
1.2.2 Uses Advised Against	No uses advised against.

1.3 Supplier Details

1.3.1 Company	Fluorochem Ltd
1.3.2 Address	Unit 14, Graphite Way Hadfield Glossop Derbys. SK13 1QH United Kingdom
1.3.3 Telephone	01457 860111
1.3.4 Email	sds@fluorochem.co.uk
1.4.1 Emergency Telephone	+44 20 3807 3798

2. Hazards Identification

2.1.1 Classification

Acute Tox. 3
Eye Dam. 1
Resp. Sens. 1
Skin Sens. 1

2.2.1 Signal Word

Danger

2.2.2 Pictograms



GHS05

GHS06

GHS07

GHS08

2.2.3 Hazards

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

2.2.4 Precautions

P101 If medical advice is needed, have product container or label at hand.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing and eye/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see Section 4 on this SDS).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to hazardous waste disposal.

2.2.5 Other Classification Hazards

3. Composition

SUBSTANCE

3.1.1 Name	3.1.2 CAS	3.1.3 EINECS	3.1.3 Composition	Hazards
Sodium hexachloroplatinate(IV) hexahydrate	19583-77-8	626-326-9		H301 Acute Tox. 3 H317 Skin Sens. 1 H318 Eye Dam. 1 H334 Resp. Sens. 1

4. First Aid Measures

4.1.1 Eye contact

Where Diphtherine is not available, rinse eyes with copious amounts of water for at least 20 minutes. Protect uninjured eye. Remove contact lenses if present and easy to do. Continue rinsing and seek immediate medical attention.

4.1.2 Ingestion

Where Diphtherine is not available, rinse mouth with copious amounts of water. Seek urgent medical advice.

4.1.3 Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a poison centre or physician if you feel unwell. If breathing is irregular or stopped, administer artificial respiration.

4.1.4 Skin Contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated clothing immediately. In case of skin reactions, consult a physician.

4.1.5 General Advice

No additional advice.

4.2.1 Most Important Symptoms and Effects

No known symptoms or effects.

4.3.1 Immediate First Aid Measures

No special immediate treatment required

5. Fire Fighting Measures

5.1.1 Suitable Fire Extinguishing Media

Carbon dioxide, alcohol resistant foam or dry chemical powder.

5.1.2 Unsuitable Fire Extinguishing Media

No known unsuitable media.

5.2.1 Special Hazards

In combustion toxic fumes may form.

5.3.1 Advice for Fire Fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

6.1.1 Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Keep personnel away from spill/leak.

6.2.1 Environmental Precautions

Prevent further leakage if safe to do so. Prevent product from entering drains. Do not let product enter waterways or sewer systems. Discharge into the environment must be avoided.

6.3.1 Containment - Methods and Materials

Absorb the spilled material with an inert absorbent (e.g. sand, silica gel, rag, vermiculite) before transferring into an airtight container. Remove all sources of ignition. Dispose of appropriately according to local regulations.

6.4.1 Referenced SDS Sections

For personal protection see section 8. For disposal see section 13.

7. Handling and Storage

Personal Precautions

7.1.1 Safe Handling

Wear appropriate personal protective equipment. Use only under a chemical fume hood. Keep away from heat/sparks/open flame/hot surfaces. Take measures to prevent the build-up of electrostatic charge. Ensure adequate exhaust ventilation, especially if dust, aerosol or fumes will be generated. Avoid contact with skin, eyes and clothing. For precautions see section 2.2.

7.1.2 Protection Against Explosion and Fire

Where possible, use anti static and spark proof equipment when handling.

7.1.3 General Occupational Hygiene

Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after use. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

Conditions for Safe Storage and Incompatibilities

7.2.1 Managing Storage Risks

Keep container tightly closed and upright. Store in a cool, dry and well-ventilated place.

7.2.2 Storage Controls

Keep container tightly closed in a cool area away from sunlight or heat sources.

7.2.3 Maintaining Integrity

Keep container tightly closed in a cool area away from sunlight or heat sources.

7.2.4 Other Advice

No other specific advice available.

7.3.1 Specific End Use(s)

No specific end uses are advised. The products supplied are for research purposes only.

8. Exposure Controls / Personal Protection

8.1.1 Control Parameters

8.2.1 Engineering Measures

Use only under a chemical fume hood ensuring adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

8.2.2 Face Protection

Wear tightly fitting safety goggles which adhere to European standard EN 166. Ensure eye bath is to hand.

8.2.3 Hand Protection

Handle with impermeable gloves. Inspect gloves before use. Gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

8.2.4 Skin Protection

Wear appropriate protective clothing ensuring all skin is covered. Wear safety shoes that meet at least S1 standards. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.2.5 Respiratory Protection

Product should be handled in a fume cupboard with adequate extraction. No respiratory equipment is needed under normal use conditions.

8.2.6 Hygiene Protection

Ensure hair or skin particles cannot enter the chemical container.

8.2.7 Environment Exposure Controls

Avoid discharge into the environment, see section 6.2.

9. Physical and Chemical Properties

9.1.1 State

Solid

9.1.2 Appearance

No data available.

9.1.3 Odour

No data available.

9.1.4 Odour Threshold

No data available.

9.1.5 pH

No data available.

9.1.6 Melting Point / Freezing Point

110°C

9.1.7 Initial Boiling Point

No data available.

9.1.8 Boiling Range

No data available.

9.1.9 Flash Point

No data available.

9.1.10 Evaporation Rate

No data available.

9.1.11 Flammability

No data available.

9.1.12 Upper / Lower Flammability or Explosion Limits

No data available.

9.1.13 Vapour Pressure

No data available.

9.1.14 Vapour Density

No data available.

9.1.15 Relative Density

2.5 g/cm³

9.1.16 Solubility

No data available.

9.1.17 Partition Coefficient

No data available.

9.1.18 Auto Ignition Temperature

No data available.

9.1.19 Decomposition Temperature	No data available.
9.1.20 Viscosity	No data available.
9.1.21 Explosive Properties	No data available.
9.1.22 Oxidising Properties	No data available.
9.2.1 Other information	No additional information available.

10. Stability and Reactivity

10.1.1 Reactivity	Hygroscopic
10.2.1 Stability	Stable under recommended storage conditions.
10.3.1 Possibility of Hazardous Reactions	None under normal storage conditions.
10.4.1 Conditions To Avoid	Heat, sparks, open flames, sources of ignition. Exposure to moisture.
10.5.1 Incompatible Materials	Strong oxidising agents.
10.6.1 Hazardous Decomposition Products	No Data Available.

11. Toxicology Information

11.1.1 Acute Toxicity	No Toxicology data available for this product.
11.1.2 Skin Corrosion / Irritation	No Toxicology data available for this product.
11.1.3 Serious Eye Damage / Irritation	Causes serious eye damage.
11.1.4 Respiratory or Skin Sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.,May cause an allergic skin reaction.,Toxic if swallowed.
11.1.5 Germ Cell Mutagenicity	No Toxicology data available for this product.
11.1.6 Carcinogenicity	No Toxicology data available for this product.
11.1.7 Reproductive Toxicity	No Toxicology data available for this product.
11.1.8 STOT-single Exposure	No Toxicology data available for this product.
11.1.9 STOT-repeated Exposure	No Toxicology data available for this product.
11.1.10 Aspiration Hazard	No Toxicology data available for this product.
11.2.1 Additional Toxicology Information	No Toxicology data available for this product.

12. Ecological Information

12.1.1 Toxicity	No Ecological data available for this product.
12.2.1 Persistence and Degradability	No Ecological data available for this product.
12.3.1 Bio-Accumulative Potential	No Ecological data available for this product.
12.4.1 Mobility in Soil	No Ecological data available for this product.
12.5.1 Results of PBT and vPvB assessment	No Ecological data available for this product.
12.7.1 Endocrine Disrupting Properties	Avoid release to the environment.
12.6.1 Other Adverse Effects	No Ecological data available for this product.

13. Disposal Considerations

13.1.1 Disposal Operations	Ensure product is disposed of by licensed waste carriers.
13.1.2 Disposal of Packaging	Ensure INNER PACKAGING is disposed of by licensed waste carriers. Some OUTER PACKAGING MAY be recyclable if not contaminated.

14. Transport Information

IATA UN Number	3288	ADR UN Number	3288	IMDG UN Number	3288
14.1.2 IATA Proper Shipping Name	TOXIC SOLID, INORGANIC, N.O.S. (Sodium hexachloroplatinate(IV) hexahydrate)	ADR Proper Shipping Name	TOXIC SOLID, INORGANIC, N.O.S. (Sodium hexachloroplatinate(IV) hexahydrate)	IMDG Proper Shipping Name	TOXIC SOLID, INORGANIC, N.O.S. (Sodium hexachloroplatinate(IV) hexahydrate)
IATA Packing Group	III	ADR Packing Group	III	IMDG Packing Group	III
14.1.4 IATA Hazard Class	6.1	ADR Hazard Class	6.1	IMDG Hazard Class	6.1
14.1.5 IATA Sub Class	- None -	ADR Sub Class	- None -	IMDG Sub Class	- None -

15. Regulatory Information

15.1.1 Regulatory Information As far as Fluorochem is aware, there are no further regulations controlling this product.

15.2.1 Chemical Safety Assessment No Chemical Safety Assessment is available for this product.

16. Other Information

16.1.2 Information Not Covered in Other Sections

ADR: Accord European sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association ICAO:International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS:Chemical Abstracts Service

Revision

1

Date Modified

Feb 25, 2025 1:43:00 PM

16.1.1 Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user. This SDS adheres to Regulation (EC) No 1907/2006, and as of 13th April 2023, also conforms to EU Regulation 2020/878.