# SAFETY DATA SHEET

# fluoro**chem.**

# 1. Identification of Substance / Mixture

Product Identifier	
1.1.2 Product Name	Silver chloride
1.1.2 Other Names	
1.1.1 Product Code	F601366
1.1.3 CAS	7783-90-6
1.1.4 MDL	MFCD00003399
1.1.5 EINECS	232-033-3
1.1.6 REACH Registration Numb	er
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

2.2.1 Signal Word

2.2.2 Pictograms

Aquatic Acute 1 Aquatic Chronic 1 Met. Corr. 1 Repr. 1B

### Warning

GHS05 GHS08 GHS09

H290 Maybe corrosive to metals.
H360 May damage fertility or the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

2.2.3 Hazards

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#### 2.2.4 Precautions

2.4 Precautions	
	P201 Obtain special instructions before use.
	P202 Do not handle until all safety precautions have been read and understood.
	P234 Keep only in original packaging.
	P260.1 Do not breathe dust/fume/gas/mist/vapours/spray.
	P264 Wash hands thoroughly after handling.
	<b>P270</b> Do not eat, drink or smoke when using this product.
	P272 Contaminated work clothing should not be allowed out of the workplace.
	P273 Avoid release to the environment.
	P280.4 Wear protective gloves/protective clothing and eye/face protection.
	P301+P310.1 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302+P352.2 IF ON SKIN: Wash with plenty of water and soap.
	P303+P361+P353.1 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
	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.
	P321 Specific treatment.
	P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
	P390 Absorb spillage to prevent material damage.
	P391 Collect spillage.
	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
	P405 Store locked up.
	P406 Store in a corrosion resistant container with a resistant inner liner.
	<b>P501.3</b> Dispose of contents/container to hazardous waste disposal.

### 2.2.5 Other Classification Hazards

# 3. Composition

3.1.1 Name	3.1.2 CAS	Einecs	3.1.3 Composition	Hazards
Silver chloride	7783-90-6	232-033-3		H290 Met. Corr. 1 H360 Repr. 1B H400 Aquatic Acute 1 H410 Aquatic Chronic 1
4. First Aid Measu	res			
4.1.1 Eye contact		Where Diphoterine is not available, rins	e eyes with copious amounts of water	for at least 20 minutes.
4.1.2 Ingestion		Where Diphoterine 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 of medical attention.	omfortable for breathing. If experiencir	ng respiratory problems seek immediate
4.1.4 Skin Contact		Where Diphoterine is not available, rins	se skin with copious amounts of water	for at least 20 minutes.
4.1.5 General Advice		No additional advice.		
4.2.1 Most Important Symp	toms and Effects	No known symptoms or effects.		
4.3.1 Immediate First Aid N	leasures	No special immediate treatment require	ed	
5. Fire Fighting Me	easures			
5.1.1 Suitable Fire Extingui	ishing Media	Carbon dioxide, alcohol resistant foam	or dry chemical powder. Use water to	extinguish fire.

# 5.1.1 Suitable Fire Extinguishing MediaCarbon dioxide, alcohol resistant foam or dry chemical powder. Use water to extinguish fire.5.1.2 Unsuitable Fire Extinguishing MediaNo known unsuitable media.5.2.1 Special HazardsThermal decomposition can lead to release of irritating gases and vapours.5.3.1 Advice for Fire FightersAs 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 Incompatabilities

7.2.1 Managing Storage Risks	Do not pack in metal. Do not pack in metal.
7.2.2 Storage Controls	Do not pack in metal., Keep container tightly closed in a cool area away from sunlight or heat sources.
7.2.3 Maintaining Integrity	Do not pack in metal., 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	455°C
9.1.7 Initial Boiling Point	1547°C
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	5.56 g/cm <sup>3</sup> at 20°C
9.1.16 Solubility	0.0019 g/L at 25°C in Water
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

9.2.1 Other information

10. Stability and Reactivity	
10.1.1 Reactivity	No known Reactivity, based on information available.
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	Do not pack in metal.
10.6.1 Hazardous Decomposition Products	No Data Available.
11. Toxicology Information	
11.1.1 Acute Toxicity	Oral LD50, Rat, >5110mg/kg
11.1.2 Skin Corrosion / Irritation	No Toxicology data available for this product.
11.1.3 Serious Eye Damage / Irritation	No Toxicology data available for this product.
11.1.4 Respiratory or Skin Sensitisation	No Toxicology data available for this product.
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	May damage fertility or the unborn child.
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.

12.6.1 Other Adverse Effe	ects	Very toxic to aquatic life with long lasting effects., Very toxic to aquatic life.
12.7.1 Endocrine Disrupti	ng Properties	Avoid release to the environment.
12.5.1 Results of PBT and	l vPvB assessment	No Ecological data available for this product.
12.4.1 Mobility in Soil		No Ecological data available for this product.
12.3.1 Bio-Accumulative I	Potential	No Ecological data available for this product.
12.2.1 Persistence and De	egradability	No Ecological data available for this product.

recyclable if not contaminated.

No data available.

No additional information available.

# 13. Disposal Considerations

13.1.1 Disposal Operations 13.1.2 Disposal of Packaging Ensure product is disposed of by licensed waste carriers. Ensure INNER PACKAGING is disposed of by licensed waste carriers. Some OUTER PACKAGING MAY be

# 14. Transport Information

IATA UN Number	3077	ADR UN Number	3077	IMDG UN Number	3077
14.1.2 IATA Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Silver chloride)	ADR Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Silver chloride)	IMDG Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Silver chloride)
IATA Packing Group	III	ADR Packing Group	III	IMDG Packing Group	III
14.1.4 IATA Hazard Class	9	ADR Hazard Class	9	IMDG Hazard Class	9
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.

No Chemical Safety Assessment is available for this product.

15.2.1 Chemical Safety Assessment

# 16. Other Information

16.1.2 Information Not Covered in Other Sections	ADR: Accord Europeen sur le transport des merchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road) RID:Reglement International concernant le transport des merchandises 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	Jun 11, 2024 9:59:00 AM
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

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.