# **Safety Data Sheet**

# fluoro**chem**

# 1. Identification of Substance / Mixture

#### **Product Identifier**

Product Name	3-(Heptafluoroisopropoxy)propyltrichlorosilane
Other Names	
Product Code	S09200
CAS	15538-93-9
MDL	MFCD00045135
EINECS	N/A
<b>REACH Registration Number</b>	
Relevant Uses	Research and Development
Uses Advised Against	No uses advised against.

#### Supplier Details

Company	Fluorochem Limited
Address	Unit 14, Graphite Way, Hadfield. SK13 1QH. UK
Telephone	+44(0)1457 860111
Email	sds@fluorochem.co.uk
Emergency Telephone	+44(0)1457 860111 (08:00 - 17:30)

#### 2. Hazards Identification

Classification	Flam. Liq. 3 Skin Corr. 1B
Signal Word	Danger
Pictograms	GHS02 GHS05
Hazards	H226 Flammable liquid and vapour. H314 Causes severe skin burns and eye damage.
Precautions	<ul> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P233 Keep container tightly closed.</li> <li>P240 Ground and bond container and receiving equipment.</li> <li>P241 Use explosion-proof equipment.</li> <li>P242 Use non-sparking tools.</li> <li>P243 Take action to prevent static discharges.</li> <li>P260 Do not breathe dust/fume/gas/mist/vapours/spray.</li> <li>P280 Wear face protection.</li> <li>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.</li> <li>P304+P330 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P310 Immediately call a POISON CENTER/doctor.</li> <li>P321 Specific treatment.</li> <li>P363 Wash contaminated clothing before reuse.</li> <li>P370+P335 In case of fire: Use dry sand to extinguish.</li> <li>P403+P235 Store in a well-ventilated place. Keep cool.</li> <li>P405 Store locked up.</li> </ul>

#### **Other Classification Hazards**

SUBSTANCE				
Name	CAS	Einecs	Composition	Hazards
3-(Heptafluoroisopropoxy)propyltrichlorosilane	15538-93-9	N/A	<= 100%	H226 Flam. Liq. 3 H314 Skin Corr. 1B
4. First Aid Measures Eye contact				holding eyelids apart. Protect uninjured ey
ngestion			tinue rinsing and seek immediate medical , if the person is conscious) and obtain imp	
Inhalation	Remove person to fre administer artificial re	·	preathing. Immediately seek medical atten	ntion. If breathing is irregular or stopped,
Skin Contact	After contact with skir	n or hair, wash immediately with	plenty of water and soap. Remove contam	ninated clothing immediately. Immediately

After contact with skin or hair, wash immediately with plenty of water and soap. Remove contaminated clothing immediately. Immediately seek medical attention. No additional advice.

Severe burns may occur. Most Important Symptoms and

No additional first aid measures required.

5. Fire Fighting Measures

Immediate First Aid Measures

**General Advice** 

Effects

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

No known unsuitable media.

Special HazardsThermal decomposition can lead to release of irritating gases and vapours.Advice for Fire FightersAs in any fire, wear self-contained breathing apparatus and full protective gear.

Personal Precautions	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Keep personnel away from spill/leak.
Environmental Precautions	Do not let product enter drains or waterways. Avoid discharge into the environment.
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.
Referenced SDS Sections	For personal protection see section 8. For disposal see section 13.

# 7. Handling and Storage

6. Accidental Release Measures

Personal Precautions	
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.
Protection Against Explosion and Fire	Where possible, use anti static and spark proof equipment when handling.
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

Managing Storage Risks	Keep away from heat/sparks/open flame/hot surfaces. Take measures to prevent the build-up of electrostatic charge.
Storage Controls	No special requirements
Maintaining Integrity	Keep container tightly closed in a cool area away from sunlight or heat sources.
Other Advice	No other specific advice available.
Specific End Use(s)	No specific end uses are advised. The products supplied are for research purposes only.

# 8. Exposure Controls / Personal Protection

#### **Control Parameters**

Country	Info	Long Term (ppm)	Long Term (mgm3)	Short Term (ppm)	Short Term (mgm3)	Ceiling (ppm)	Ceiling (mgm3)	Other Unit	Remarks
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.									
Face Protectio	n		Wear tightly fitting safety goggles which adhere to European standard EN 166. Ensure eye bath is to hand.						
Hand Proectio	n		Handle with impermeable gloves. Inspect gloves before use. Gloves must satisfy the specifications of EU Directive 89/686/EEC and the standa 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.					act with this product.	
Skin Protectio	n		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.						
Respiratory Pr	otection		Product should be handled in a fume cupboard with adequate extraction. No respiratory equipment is needed under normal use conditions.					ormal use conditions.	
Hygiene Prote	ction		Ensure hair or skin particles cannot enter the chemical container.						
Environment E	Avoid discharge into the environment, see section 6.2.								

# 9. Physical and Chemical Properties

5. Physical and chemical Properties	
State	Liquid
Appearance	Clear to straw liquid
Odour	No data available.
Odour Threshold	No data available.
рН	No data available.
Melting Point / Freezing Point	No data available.
Initial Boiling Point	No data available.
Boiling Range	85ŰC to 87ŰC at 35mmHg
Flash Point	No data available.
Evaporation Rate	No data available.
Flammability	No data available.
Upper / Lower Flammability or Explosion Limits	No data available.
Vapour Pressure	No data available.
Vapour Density	No data available.
Relative Density	1.497g/cm3
Solubility	No data available.
Partion Coefficient	No data available.
Auto Ignition Temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.
Explosive Properties	No data available.
	No data available.

Reactivity	No known reactivity, based on information available.
Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal storage conditions.
Conditions To Avoid	Heat, sparks, open flames, sources of ignition. Exposure to moisture.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	No Data Available.

# 11. Toxicology Information

Acute Toxicity	No Toxicology data available for this product.
Skin Corrosion / Irritation	Strong corrosive effect on skin and mucous membranes.
Serious Eye Damage / Irritation	Strong corrosive effect.
Respiratory or Skin Sensitisation	No Toxicology data available for this product.
Germ Cell Mutagenicity	No Toxicology data available for this product.
Carcinogencity	No Toxicology data available for this product.
Reproductive Toxicity	No Toxicology data available for this product.
STOT-single Exposure	No Toxicology data available for this product.
STOT-repeated Exposure	No Toxicology data available for this product.
Aspiration Hazard	No Toxicology data available for this product.
Additional Toxicology Information	No Toxicology data available for this product.

# 12. Ecological Information

Toxicity	No Ecological data available for this product.	
Persistence and Degradability	No Ecological data available for this product.	
<b>Bio-Accumulative Potential</b>	No Ecological data available for this product.	
Mobility in Soil	oil No Ecological data available for this product.	
Results of PBT and vPvB assessment No Ecological data available for this product.		
Endocrine Disrupting Properties	No Ecological data available for this product.	
Other Adverse Effects	No Ecological data available for this product.	

# 13. Disposal Considerations

**Disposal Operations** 

**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 recyclable if not contaminated.

IMDG IBC

Instructions

IMDG Tank Instructions IMDG Tank Provisions -

T14

TP2, TP7, TP13, TP27

#### 14. Transport Information

	2986		2986		2986
IATA UN Number	2500	ADR UN Number	2500	IMDG UN Number	2500
IATA Proper Shipping Name	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.(3- (Heptafluoroisopropoxy)propyltrichlorosilane)	ADR Proper Shipping Name	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.(3- (Heptafluoroisopropoxy)propyltrichlorosilane)	IMDG Proper Shipping Name	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.(3- (Heptafluoroisopropoxy)propyltrichlorosilane)
IATA Packing Group	II	ADR Packing Group	Ш	IMDG Packing Group	11
IATA Hazard Class	8	ADR Hazard Class	8	IMDG Hazard Class	8
IATA Sub Class	3	ADR Sub Class	3	IMDG Sub Class	3
				IMDG Special Provisions	
				IMDG IBS Instructions	

#### 15. Regulatory Information

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

**Chemical Safety Assessment** 

No Chemical Safety Assessment available for this product.

**Regulatory Information** 

Information Not Covered in OtherADR: Accord Europeen sur le transport des merchandises Dangereuses par Route(European Agreement concerning the International Carriage of<br/>Dangerous Goods by road)<br/>RID:Reglement International concernant le transport des merchandises dangereuses par chemin de fer (Regulations concerning the International<br/>transport of Dangerous Goods by Rail)<br/>IMDG: International Maritime Code for Dangerous Goods<br/>IATA: International Air Transport Association<br/>IATA-DGR: Dangerous Goods Supulations by the International Air Transport Association<br/>IATA-DGR: Dangerous Goods Supulations by the International Air Transport Association ICAO:International Civil Aviation Organization<br/>ICAO-TI: Technical Instructions by the ICAO<br/>GHS: Globally Harmonized System of Classification and Labelling of Chemicals<br/>CAS:Chemical Abstracts ServiceO3/11/2022Date Modified03/11/2022DisclaimerThe product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological,<br/>or human or animal use. As such, in most cases, the toxicological,

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.