SAFETY DATA SHEET

fluoro**chem.**

1. Identification of Substance / Mixture

Product Identifier	
1.1.2 Product Name	Adamantane-1,3,5,7-tetracarboxylic acid
1.1.2 Other Names	
1.1.1 Product Code	F617381
1.1.3 CAS	100884-80-8
1.1.4 MDL	
1.1.5 EINECS	N/A
1.1.6 REACH Registration Number	
1.2.1 Relevant Uses	For research and development purposes only.
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	Eye Irrit. 2A
	Skin Sens. 1
2.2.1 Signal Word	Warning
2.2.2 Pictograms	\wedge
	GHS07
2.2.3 Hazards	H317 May cause an allergic skin reaction.
2.2.4 Precautions	H319 Causes serious eye irritation.
2.2.4 Fieldutions	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
	P272 Contaminated work clothing should not be allowed out of the workplace. P280.4 Wear protective gloves/protective clothing and eye/face protection.
	P302+P352.1 IF ON SKIN: Wash with plenty of water. 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.
	F SUOTE STS IT EXPOSED OF CONCERNED. GET MEDICALAUVICE/ALLENLION.

- **P333+P313** If skin irritation or rash occurs: Get medical advice/attention.
- **P337+P313** If eye irritation persists: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

- P405 Store locked up.
 - P501.3 Dispose of contents/container to hazardous waste disposal.

2.2.5 Other Classification Hazards

3. Composition of Ingredients

SUBSTANCE				
3.1.1 Name	3.1.2 CAS	Einecs	3.1.3 Composition	Hazards
Adamantane-1,3,5,7- tetracarboxylic acid	100884-80-8	N/A		H317 Skin Sens. 1 H319 Eye Irrit. 2A

4. First Aid Measures

4.1.1 Eye contact	Where Diphoterine 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	If swallowed rinse the mouth with plenty of water (only if the person is conscious) and contact a poison centre or physician if you feel unwell.
4.1.3 Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration and seek immediate medical attention.
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. Use water to extinguish fire.
5.1.2 Unsuitable Fire Extinguishing Media	No known unsuitable media.
5.2.1 Special Hazards	Thermal decomposition can lead to release of irritating gases and vapours.
5.3.1 Advice for Fire Fighters	As in any fire, wear self-contained breathing apparatus and full protective gear.
6. Accidental Release Measure	2S

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	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	No data available.
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	No data available.
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	No data available.
9.1.16 Solubility	
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	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	Strong oxidising agents.
10.6.1 Hazardous Decomposition Products	No Data Available.

11. Toxicology Information

11.1.1 Acute Toxicity	No Toxicolog
11.1.2 Skin Corrosion / Irritation	No Toxicolog
11.1.3 Serious Eye Damage / Irritation	No Toxicolog
11.1.4 Respiratory or Skin Sensitisation	May cause a
11.1.5 Germ Cell Mutagenicity	No Toxicolog
11.1.6 Carcinogenicity	No Toxicolog

Io Toxicology data available for this product.
Io Toxicology data available for this product.
Io Toxicology data available for this product.
Any cause an allergic skin reaction.
Io Toxicology data available for this product.
Io Toxicology data available for this product.

11.1.7 Reproductive Toxicity

	001170	No Toxicology data available fo	this product.		
11.1.8 STOT-single Exp	osure				
11.1.9 STOT-repeated E	xposure	No Toxicology data available fo	this product.		
11.1.10 Aspiration Haza	ard	No Toxicology data available fo	this product.		
11.2.1 Additional Toxico	ology Information	No Toxicology data available fo	this product.		
12. Ecological Ir	oformation				
	normation				
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-Accumulativ	e 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 a	ind vPvB assessment	No Ecological data available for	this product.		
12.7.1 Endocrine Disru	pting Properties	No Ecological data available for	this product.		
12.6.1 Other Adverse E	ffects	No Ecological data available for	this product.		
13. Disposal Co	nsiderations				
		Ensure product is disposed of t	ov licensed waste carriers.		
13.1.1 Disposal Operati	ions aging	Ensure product is disposed of the Ensure INNER PACKAGING is recyclable if not contaminated		ste carriers. Some OUTER P/	ACKAGING MAY be
13.1.1 Disposal Operati	ions aging			ste carriers. Some OUTER P/	ACKAGING MAY be
3.1.1 Disposal Operati 3.1.2 Disposal of Pack	ions aging	Ensure INNER PACKAGING is		ste carriers. Some OUTER P/	ACKAGING MAY be
13. Disposal Co 13.1.1 Disposal Operati 13.1.2 Disposal of Pack 14. Transport In 14. UN Number	ions aging	Ensure INNER PACKAGING is		ste carriers. Some OUTER P/	ACKAGING MAY be
13.1.1 Disposal Operati 13.1.2 Disposal of Pack 14. Transport In ATA UN Number 14.1.2 IATA Proper	ions aging	Ensure INNER PACKAGING is recyclable if not contaminated. ADR UN Number ADR Proper Shipping Name			ACKAGING MAY be Non Hazardous For Transport (Adamantane-1,3,5,7- tetracarboxylic acid)
13.1.1 Disposal Operati 13.1.2 Disposal of Pack 14. Transport In ATA UN Number 14.1.2 IATA Proper Shipping Name	formation Non Hazardous For Transport (Adamantane-1,3,5,7-	Ensure INNER PACKAGING is recyclable if not contaminated. ADR UN Number ADR Proper Shipping Name	disposed of by licensed was Non Hazardous For Transport (Adamantane-1,3,5,7-	IMDG UN Number IMDG Proper Shipping	Non Hazardous For Transport (Adamantane-1,3,5,7-
13.1.1 Disposal Operati 13.1.2 Disposal of Pack 14. Transport In	ions aging formation Non Hazardous For Transport (Adamantane-1,3,5,7- tetracarboxylic acid)	Ensure INNER PACKAGING is recyclable if not contaminated. ADR UN Number ADR Proper Shipping Name	disposed of by licensed was Non Hazardous For Transport (Adamantane-1,3,5,7-	IMDG UN Number IMDG Proper Shipping Name	Non Hazardous For Transport (Adamantane-1,3,5,7-

No Toxicology data available for this product.

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

15.2.1 Chemical Safety No Chemical Safety Assessment is available for this product. 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	Oct 16, 2023 3:17:00 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

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