# Safety Data Sheet

# fluoro**chem**

## 1. Identification of Substance / Mixture

#### **Product Identifier**

N, N-Diethylethylenediamine
2-Diethylaminoethylamine
236769
100-36-7
MFCD00008176
N/A
Research and Development
No uses advised against.

#### Supplier Details

Company	Fluorochem Limited
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#### 2. Hazards Identification

Classification	Flam. Liq. 3		
	Acute Tox. 3 Skin Corr. 1B		
Signal Word	Danger		
Pictograms			
	GHS02 GHS05 GHS06		
Hazards	H226 Flammable liquid and vapour. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage.		
Precautions	H311 Toxic in contact with skin.		

**Other Classification Hazards** 

## 3. Composition of Ingredients

#### SUBSTANCE

Name	CAS	Einecs	Composition
N,N-Diethylethylenediamine	100-36-7	N/A	<= 100%

P405 Store locked up.

#### Hazards

H226 Flam. Liq. 3 H311 Acute Tox. 3 H314 Skin Corr. 1B

Eye contact	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelic apart. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing and seek immediate medical attention.
Ingestion	If swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately seek medical attention. If breathing is irregular or stopped, administer artificial respiration.
Skin Contact	After contact with skin or hair, wash immediately with plenty of water and soap. Remove contaminated clothin immediately. Immediately seek medical attention.
General Advice	No additional advice.
Most Important Symptoms and Effects	Severe burns may occur.
Immediate First Aid Measures	No additional first aid measures required.
5. Fire Fighting Measures	
Suitable Fire Extinguishing Media	Carbon dioxide, alcohol resistant foam or dry chemical powder.
Unsuitable Fire Extinguishing Media	No known unsuitable media.
Special Hazards	In combustion toxic fumes may form.
Advice for Fire Fighters	As in any fire, wear self-contained breathing apparatus and full protective gear.
6. Accidental Release Measures	
Personal Precautions	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Keep personnel away from spill/leak.
	Do not let product enter drains or waterways. Avoid discharge into the environment.
Environmental Precautions	
Environmental Precautions 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 regulatio

**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	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 a close to the workstation location.								
Face Protect	tion		Wear tightly fitting safety goggles which adhere to European standard EN 166. Ensure eye bath is to hand.			bath is to hand.			
Hand Proect	ion		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 us in accordance with applicable laws and good laboratory practices. Wash and dry hands.			chnique (without			
Skin Protect	ion		Wear appropriate protective clothing ensuring all skin is covered. Wear safety shoes that meet at least S1		eet 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 Protection	Product should be handled in a fume cupboard with adequate extraction. No respiratory equipment is needed under normal use conditions.
Hygiene Protection	Ensure hair or skin particles cannot enter the chemical container.
Environment Exposure Controls	Avoid discharge into the environment, see section 6.2.

## 9. Physical and Chemical Properties

	Liquid
State	
Appearance	Clear colourless to slightly pale yellow liquid
Odour	No data available.
Odour Threshold	No data available.
рН	No data available.
Melting Point / Freezing Point	No data available.
Initial Boiling Point	146°C
Boiling Range	145°C to 147°C
Flash Point	89.6ŰC
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	4.0
Relative Density	0.82g/cm3
Solubility	in Water (Miscible)
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.
Oxidising Properties	No data available.
Other information	No additional information available

# 10. Stability and Reactivity

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.

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	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.

#### 14. Transport Information

IATA UN Number	2685	ADR UN Number	2685	IMDG UN Number	2685
IATA Proper Shipping Name	N,N- DIETHYLETHYLENEDIAMINE	ADR Proper Shipping Name	N,N- DIETHYLETHYLENEDIAMINE	IMDG Proper Shipping Name	N,N- DIETHYLETHYLENEDIAMINE
IATA Packing Group	II	ADR Packing Group	II	IMDG Packing Group	II
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	
				IMDG IBC Instructions	IBC02
				IMDG Tank Instructions	Τ7
				IMDG Tank Provisions	TP2

15. Regulatory Information	
Regulatory Information Chemical Safety Assessment	As far as Fluorochem is aware, there are no further regulations controlling this product. No Chemical Safety Assessment available for this product.
16. Other Information	
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 1.283
Revision	03/11/2022
Date Modified Disclaimer	The product listed is for research and development purposes only and not for human or animal use. As such, in
Disclame	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.