## **SAFETY DATA SHEET**

# fluorochem.

## 1. Identification of Substance / Mixture

### **Product Identifier**

**1.1.2 Product Name** 1,2-Dichlorobenzene

1.1.2 Other Names

**1.1.1 Product Code** F216310 **1.1.3 CAS** 95-50-1

**1.1.4 MDL** MFCD00000535 **1.1.5 EINECS** 202-425-9

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 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

1.3.3 Telephone

Acute Tox. 4 Aquatic Chronic 1 Eye Irrit. 2A Skin Irrit. 2 STOT SE 3

2.2.1 Signal Word

Warning

2.2.2 Pictograms





GHS07

GHS09

2.2.3 Hazards

H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

#### 2.2.4 Precautions

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.

**P271** Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280.4 Wear protective gloves/protective clothing and eye/face protection.

P301+P312.1 IF SWALLOWED: Call a doctor if you feel unwell.

P302+P352.1 IF ON SKIN: Wash with plenty of 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.

P330 Rinse mouth.

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.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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

1,2-Dichlorobenzene 95-50-1 202-425-9

H302 Acute Tox. 4 H315 Skin Irrit. 2 H319 Eye Irrit. 2A H335 STOT SE 3 H410 Aquatic Chronic 1

### 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.

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 comfortable for breathing. If experiencing respiratory problems seek immediate

medical attention

4.1.4 Skin Contact Where Diphoterine is not available, rinse skin with copious amounts of water for at least 20 minutes.

4.1.5 General Advice No additional advice.

 $\textbf{4.2.1 Most Important Symptoms and Effects} \qquad \text{No known symptoms or effects}.$ 

**4.3.1 Immediate First Aid Measures**No additional first aid measures 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 Measures

6.1.1 Personal Precautions

Use personal protective equipment. Ensure Hexafluorine washing solution is to hand. 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.

### 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

7.1.3 General Occupational Hygiene

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

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)

### 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. Ensure

Hexafluorine washing solution is close to workstation. 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 Hexafluorine eye wash 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.

Ensure Hexafluorine washing solution is to hand. 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.

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 Liquid

9.1.2 Appearance No data available.

9.1.3 Odour Aromatic
9.1.4 Odour Threshold 0.3ppm

9.1.5 pH No data available.

9.1.6 Melting Point / Freezing Point -17.03°C
9.1.7 Initial Boiling Point 180°C

9.1.8 Boiling Range No data available.

9.1.9 Flash Point 66°C Method: Closed Cup

 9.1.10 Evaporation Rate
 No data available

 9.1.11 Flammability
 No data available

 9.1.12 Upper / Lower Flammability or
 No data available

Explosion Limits

 9.1.13 Vapour Pressure
 2.08 hPa at 25°C

 9.1.14 Vapour Density
 5.1 g/cm³

9.1.15 Relative Density 1.31 g/cm³ at 25°C

**9.1.16 Solubility** 0.1558 g/L at 25°C in Water

 9.1.17 Partition Coefficient
 3.433 at 25°C

 9.1.18 Auto Ignition Temperature
 640°C at 101325 Pa

 9.1.19 Decomposition Temperature
 No data available.

 9.1.20 Viscosity
 1.324 mPa s at 20°C

 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

11.1.2 Skin Corrosion / Irritation

11.1.5 Germ Cell Mutagenicity

11.1.6 Carcinogenicity

11.1.3 Serious Eye Damage / Irritation

11.1.4 Respiratory or Skin Sensitisation

11.1.1 Acute Toxicity Oral LD50, Rat, 2000mg/kg

Inhalation LC50, Mouse - female, 1236ppm/6 h Subcutaneous LD50, Rat, 5000-1000mg/kg

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** Toxicity to fish:

Oncorhynchus mykiss LC50 - 1.52mg/l/96 h
Toxicity to aquatic invertebrates:

Ceriodaphnia dubia EC50 - 0.66mg/l/48 h Toxicity to aquatic algae and cyanobacteria: Raphidocelis subcapitata EC50 - 2.2mg/l/96 h 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** Log Pow: 3.433

**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**Very toxic to aquatic life with long lasting effects.

### 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
 1591
 ADR UN Number
 1591
 IMDG UN Number
 1597

14.1.2 IATA Propero-DICHLOROBENZENEADR Proper Shippingo-DICHLOROBENZENEIMDG Proper Shippingo-DICHLOROBENZENEShipping Name(1,2-Dichlorobenzene)Name(1,2-Dichlorobenzene)Name(1,2-Dichlorobenzene)

 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** 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

**Date Modified** 

16.1.1 Disclaimer

Sep 20, 2023 10:23:00 AM

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.