

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **1,2-Dichlorobenzene**
Product Code 216310
CAS Number 95-50-1
Other Names
IUPAC
MFCD Number MFCD00000535
EC/EINECS 202-425-9
REACH Number Index-No

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet

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Hadfield
Derbyshire
SK13 1QH
UK

Telephone: +44(0)1457 860111
Fax: +44(0)1457 892799
Email: sds@fluorochem.co.uk



4. Emergency telephone number

+44(0)7855 268577 -

2. Hazards Identification

1. Classification of the substance or mixture

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

2. Label elements

Signal Word **Warning**



Hazard Statements

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.

Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P391	Collect spillage.
P501	Dispose of contents/container to hazardous or special waste collection point.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
1,2-Dichlorobenzene		
CAS Number: 95-50-1 EC/EINECS: 202-425-9	H302, H315, H319, H335, H410 Acute Tox. 4, Aquatic Chronic 1, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3	<=100%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P332 + P313: If skin irritation occurs: Get medical advice/attention.
<i>Eye Contact</i>	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: Get medical advice/attention.
<i>Ingestion</i>	P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. Wash out mouth with water.
<i>Inhalation</i>	P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

2. Most important symptoms and effects

No symptoms.

3. Indication of any immediate medical attention

P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P321: Specific treatment (see ' First aid on this label).
No additional measures required

5. Firefighting measures

1. Extinguishing Media

<i>Suitable</i>	Carbon dioxide. Dry chemical powder. Water.
<i>Unsuitable</i>	Do not use water with a full water jet

2. Special Hazards arising from the substance or mixture

In combustion toxic fumes may form.

3. Advice for Fire Fighters

Wear protective clothing to prevent contact with skin and eyes.
Wear self-contained breathing apparatus.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

P391: Collect spillage.
Mix with sand or vermiculite.
Transfer to a suitable container.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

Safe Handling Handle in fume hood.
 Wash hands immediately after contamination.
 P264: Wash hands and face thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P273: Avoid release to the environment.

Protection against explosions and fires normal measures for preventive fire protection

2. Conditions for safe storage, including any incompatibilities

Managing Storage Risks Keep container tightly closed.
 Store in cool, well ventilated area.

Storage Controls No special requirements

Maintaining Integrity Keep in tightly closed container in cool area away from direct sunlight or heat sources.

Other advice P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
 P405: Store locked up.

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

General protective and hygiene measures P280: Wear protective gloves/protective clothing/eye protection/face protection.
 The standard precautionary measures should be adhered to when handling
 Wash hands during breaks and at the end of handling the material
 Immediately remove any contaminated clothing

Engineering measures P271: Use only outdoors or in a well-ventilated area.
 Ensure there is sufficient ventilation of the area.

Eye / Face Protection Safety Glasses.

Hand protection Protective gloves.

Respiratory protection P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 Respiratory protection not required.

Skin protection Protective clothing.

Other personal protection advice no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Clear colourless to very pale yellow liquid
Odour	Aromatic
Odour threshold	0.30 ppm
PH	No Data Available
Melting point / Freezing point	No Data Available
Initial boiling point and boiling range	180°C
Flash point	69°C
Evaporation rate	No Data Available

Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	9% / 2%
Vapour pressure	0.16kPa/20°C
Vapour density	5.1
Relative density	1.31
Solubility(ies):	Many organic solvents. Insoluble in water (100mg/l)
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	648°C
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

no unusual reactivity

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

no hazardous reactions known

4. Conditions to Avoid

Light sensitive.

5. Incompatible Materials

Strong oxidizing agents.
Aluminium and their alloys.

6. Hazardous Decomposition Products

In combustion emits toxic fumes.
In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
In combustion emits toxic fumes of hydrogen chloride / phosgene.

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	ihl-rat LCLo:821 ppm/7H orl-mus LD50:4386 mg/kg orl-rat LD50:500 mg/kg skn-rbt LD50:>10 g/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	irritant effect eye-rbt 100 mg/30S rinse MLD
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	mmo-mus-lym 6500 ug/L (+S9) mrc-smc 1 mmol/L sce-ham-ovr 59 mg/L spm-rat-ipr 250 mg/kg
<i>Carcinogenicity</i>	orl-rat TDLo:30900mg/kg/103W-I IARC = Group 3 (Not classifiable as carcinogenic to humans).
<i>Reproductive toxicity</i>	

not known

STOT-single exposure not known

STOT-repeated exposure not known

Aspiration hazard not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. Ecological Information

1. Toxicity

Fish: 96h LC50:3.8 mg/L (Oryzias latipes)
Crustacea: 48h EC50:1.4 mg/L (Daphnia magna)
Algae: 72h EC50:6.9 mg/L (Selenastrum capricornutum)

2. Persistence and degradability

0% (by BOD), 3% (by GC)

3. Bio-Accumulative Potential

150 - 230 (conc. 100 ug/L), 90 - 260 (conc. 10 ug/L)

4. Mobility and Soil

log Pow: 3.38
Soil adsorption (Koc): 280, 320
Henry's Law constant (PaM³/mol):
152

5. Results of PBT & vPvB assessment

Water Hazard Classes (WGK) : Class 2 - Water Polluting substance

6. Other adverse effects

not known

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations Consult state, local or national regulations for proper disposal.
Hand over to authorised disposal company as hazardous waste.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

1. **UN Number:** 1591
2. **Shipping Name:** o-DICHLOROBENZENE
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

1. **UN Number:** 1591
2. **Shipping Name:** o-DICHLOROBENZENE
3. **Transport hazard class(es):** : 6 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Sea (IMDG)

1. **UN Number:** 1591
2. **Shipping Name:** o-DICHLOROBENZENE
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:** IBCINS: IBC03
IBCPPROV: -
UNTANKINS: -
TANKPROV: TP1

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)
RID:Reglement International concernant le transport des marchandises 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

2. Associated risk phrases according to European directive 67/548/EEC

3. 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 with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.