

# Safety Data Sheet

#19376805 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

| PRODUCT                    | CAS NUMBER     | FORMULA        | VERSION   | REVISION DATE      |
|----------------------------|----------------|----------------|-----------|--------------------|
| <b>1,2-Dichlorobenzene</b> | <b>95-50-1</b> | <b>C6H4Cl2</b> | <b>10</b> | <b>17 Sep 2026</b> |

## SECTION 1

### Identification

#### 1.1 Product identifier

**Product name** 1,2-Dichlorobenzene

**CAS number** 95-50-1

**EC / EINECS number** 202-425-9

**Chemical formula** C6H4Cl2

**Molecular weight** 147.00

**SMILES** C1=CC=C(C(=C1)Cl)Cl

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.

#### 1.3 Details of the supplier of the safety data sheet

Molekula Limited  
1 Millennium Way, Newton Aycliffe  
Durham, DL5 6JW, United Kingdom  
info@molekula.com · +44 (0) 3302 000333

#### 1.4 Emergency telephone number

**0344 892 0111** — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

## SECTION 2

### Hazard identification

#### 2.1 Classification of the substance or mixture

Acute Tox. 4; H302  
Skin Irrit. 2; H315  
Skin Sens. 1; H317  
Eye Irrit. 2; H319  
STOT SE 3; H335  
Aquatic Acute 1; H400  
Aquatic Chronic 1; H410

## 2.2 Label elements



### WARNING

| CODE         | HAZARD STATEMENT                                                                                                    |
|--------------|---------------------------------------------------------------------------------------------------------------------|
| H302         | Harmful if swallowed                                                                                                |
| H315         | Causes skin irritation                                                                                              |
| H317         | May cause an allergic skin reaction                                                                                 |
| H319         | Causes serious eye irritation                                                                                       |
| H335         | May cause respiratory irritation                                                                                    |
| H400         | Very toxic to aquatic life                                                                                          |
| H410         | Very toxic to aquatic life with long lasting effects                                                                |
| CODE         | PRECAUTIONARY STATEMENT                                                                                             |
| 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                                           |
| P301+312     | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell                                           |
| P305+351+338 | IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing |

## 2.3 Other hazards

This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII.

## SECTION 3

**Composition / information on ingredients****3.1 Substances**

|                                                                 |                                                                                                                                                              |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>                                                     | 1,2-Dichlorobenzene                                                                                                                                          |
| <b>CAS number</b>                                               | 95-50-1                                                                                                                                                      |
| <b>EC number</b>                                                | 202-425-9                                                                                                                                                    |
| <b>Concentration / purity</b>                                   | ~100%                                                                                                                                                        |
| <b>Classification according to Regulation (EC) No 1272/2008</b> | Acute Tox. 4; H302<br>Skin Irrit. 2; H315<br>Skin Sens. 1; H317<br>Eye Irrit. 2; H319<br>STOT SE 3; H335<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410 |
| <b>Hazard statements</b>                                        | H302, H315, H317, H319, H335, H400, H410                                                                                                                     |
| <b>Acute toxicity estimate (ATE)</b>                            | <i>No data available</i>                                                                                                                                     |
| <b>Impurities / stabilising additives</b>                       | <i>Not applicable</i>                                                                                                                                        |

## SECTION 4

**First-aid measures****4.1 Description of first aid measures**

|                     |                                                                                                                                                                |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Remove victim to fresh air; give oxygen or artificial respiration if breathing difficulties persist. Get medical advice.                                       |
| <b>Skin contact</b> | Remove contaminated clothing (unless stuck to skin) and wash immediately with plenty of water. Consult a doctor if irritation persists.                        |
| <b>Eye contact</b>  | Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation persists. |
| <b>Ingestion</b>    | Rinse mouth with water. Do NOT induce vomiting. Get medical advice immediately.                                                                                |

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

**4.2 Most important symptoms and effects, both acute and delayed**

Treat symptomatically

**4.3 Indication of any immediate medical attention and special treatment needed**

*No data available*

## SECTION 5

### Fire-fighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** Foam, dry powder, carbon dioxide, water spray, sand.

**Unsuitable extinguishing media** Do not use a heavy water stream.

#### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: carbon oxides (CO, CO<sub>2</sub>), hydrogen chloride gas. Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating.

#### 5.3 Advice for firefighters

Keep container tightly closed, away from heat/sparks/flames. Use water spray for cooling exposed containers. Do not enter fire area without proper protective equipment.

## SECTION 6

### Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent entry into sewers/public waters; notify authorities if liquid enters sewers or public waters.

#### 6.3 Methods and material for containment and cleaning up

Contain spillage with bunding; soak up with inert solids (e.g., clay, diatomaceous earth). Do not empty into drains; dispose at hazardous waste collection point.

#### 6.4 Reference to other sections

*For specific precautions, see Section 8 and Section 13.*

## SECTION 7

### Handling & storage

#### 7.1 Precautions for safe handling

Avoid formation of vapors; provide local exhaust or general room ventilation. Wash hands and exposed areas before eating, drinking, or smoking.

#### 7.2 Conditions for safe storage, including any incompatibilities

**Storage temperature** Ambient

**Conditions for safe storage (incompatibilities)** Keep in a cool, well-ventilated place away from heat sources, direct sunlight, and ignition sources. Keep container closed when not in use. Incompatible with strong oxidizing agents. Light sensitive.

#### 7.3 Specific end use(s)

*See Section 1.2.*

## SECTION 8

**Exposure controls / personal protection****8.1 Control parameters**

**Occupational exposure limits (OEL / WEL)** *Not applicable*

**DNEC/PNEC data**

|                        |              |
|------------------------|--------------|
| Fresh water            | 0.0037 mg/l  |
| Marine water           | 0.00037 mg/l |
| Sewage treatment plant | 4.7 mg/l     |
| Fresh water sediment   | 0.177 mg/kg  |
| Marine sediment        | 0.0177 mg/kg |
| Soil                   | 0.0333 mg/kg |
| oral                   | 5.56 mg/kg   |

**8.2 Exposure controls**

**Eye / face protection**

Safety glasses  
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

**Skin / hand protection**

Recommended gloves: Viton rubber (fluor rubber), 0.7mm (480mins).

**Respiratory protection**

Full-face respirator  
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

**Other protection** *No data available*

**Environmental exposure controls** *No data available*

## SECTION 9

**Physical & chemical properties****9.1 Information on basic physical and chemical properties**

**Appearance / physical state** Liquid  
**DERIVED FROM: LITERATURE**

**Colour** Colourless  
**DERIVED FROM: LITERATURE**

**Odour** Characteristic  
**DERIVED FROM: LITERATURE**

**Melting / freezing point** -18 to -17 °C  
**DERIVED FROM: LITERATURE**

**Boiling point** 178 to 180 °C  
**DERIVED FROM: LITERATURE**

**Flammability** *No data available*

**Lower and upper explosion limit** *No data available*

**Flash point** 66 °C  
**DERIVED FROM: LITERATURE**

|                                                          |                                                                                      |
|----------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Auto-ignition temperature</b>                         | 648 °C<br>DERIVED FROM: LITERATURE                                                   |
| <b>Decomposition temperature</b>                         | No data available                                                                    |
| <b>pH</b>                                                | Not applicable                                                                       |
| <b>Acidity</b>                                           | Neutral<br>DERIVED FROM: LITERATURE                                                  |
| <b>Kinematic viscosity</b>                               | No data available                                                                    |
| <b>Solubility</b>                                        | Partly soluble in water ( $\approx 0.1558$ g/L at 25 °C)<br>DERIVED FROM: LITERATURE |
| <b>Partition coefficient n-octanol/water (log value)</b> | $\approx 3.433$ (log Pow) at 25 °C<br>DERIVED FROM: LITERATURE                       |
| <b>Vapour pressure</b>                                   | 1.6 hPa at 20 °C<br>DERIVED FROM: LITERATURE                                         |
| <b>Density (g/mL)</b>                                    | 1.306 g/mL<br>DERIVED FROM: LITERATURE                                               |
| <b>Relative vapour density</b>                           | No data available                                                                    |
| <b>Particle characteristics</b>                          | No data available                                                                    |

## 9.2 Other information

No data available

## SECTION 10

### Stability & reactivity

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Sunlight, heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

#### 10.5 Incompatible materials

Strong oxidizers,  
Alkali metals  
Alkaline earth metals  
Aluminium  
Light metals

#### 10.6 Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>) and hydrogen chloride gas at elevated temperatures. See section 5

## SECTION 11

### Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity (LD50 / LC50)** LD50 Oral - Rat - male and female - 2,000 mg/kg  
Acute toxicity estimate Inhalation - 4 h - 11.1 mg/l - vapour  
LD50 Dermal - Rabbit - > 10,000 mg/kg

**Skin corrosion / irritation** *Not applicable*

**Eye corrosion / irritation** *Not applicable*

**Respiratory / skin sensitisation** *Not applicable*

**Carcinogenicity** *Not applicable*

**Mutagenicity** *Not applicable*

**Reproductive toxicity** *Not applicable*

**STOT (single / repeated exposure)** *Not applicable*

**Aspiration hazard** *Not applicable*

#### 11.2 Information on other hazards

This product does not contain any known or suspected Endocrine disruptors.

## SECTION 12

### Ecological information

#### 12.1 Toxicity

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.58

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Ceriodaphnia dubia (water flea) - 0.66 mg/l - 48 h

Toxicity to algae ErC50 - Pseudokirchneriella subcapitata (green algae) - 2.2 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) semi-static test EC50 - Daphnia magna (Water flea) - 0.55 mg/l - 14 d

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 0 % - Not readily biodegradable.

#### 12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 56 d

at 25 °C - 0.01 mg/l(1,2-Dichlorobenzene)

Bioconcentration factor (BCF): 90 - 260

#### 12.4 Mobility in soil

Low mobility in soil; poorly soluble in water

#### 12.5 Results of PBT and vPvB assessment

*Not applicable*

## 12.6 Endocrine disrupting properties

See Section 11.2.

## 12.7 Other adverse effects

No data available

### SECTION 13

## Disposal considerations

### 13.1 Waste treatment methods

Dispose in accordance with local/national regulations; avoid environmental release; hazardous waste due to toxicity

### SECTION 14

## Transport information

### 14.1 UN number or ID number

UN1591

### 14.2 UN proper shipping name

O-DICHLOROBENZENE

### 14.3 Transport hazard class(es)

6.1



### 14.4 Packing group

III

### 14.5 Environmental hazards

Yes.

### 14.6 Special precautions for user

Special precautions for user    *Not applicable*

Transport category                      2

Tunnel code                                (E)

Packing instruction (ADR)                P001

Packing instruction (IMDG)              P001

### 14.7 Maritime transport in bulk according to IMO instruments

No data available

## SECTION 15

### Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

|                                                |                   |
|------------------------------------------------|-------------------|
| Substance-specific regulations (e.g. licences) | No data available |
|------------------------------------------------|-------------------|

|            |      |
|------------|------|
| REACH code | Y110 |
|------------|------|

|                   |                |
|-------------------|----------------|
| ECHA notification | Not applicable |
|-------------------|----------------|

#### 15.2 Chemical safety assessment

Not required

## SECTION 16

### Other information

|                                    |                |
|------------------------------------|----------------|
| Revision notes / other information | Not applicable |
|------------------------------------|----------------|

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at [info@molekula.com](mailto:info@molekula.com).