# 1,3-DICHLOROBENZENE
CAS No 541-73-1

## MATERIAL SAFETY DATA SHEET
SDS/MSDS

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifiers**
- **Product name**: 1,3-Dichlorobenzene
- **CAS-No.**: 541-73-1

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- **Identified uses**: Laboratory chemicals, Industrial & for professional use only.

1.3 **Details of the supplier of the safety data sheet**
- **Company**: Central Drug House (P) Ltd
  7/28 Vardaan House
  New Delhi -110002
  INDIA
- **Telephone**: +91 11 49404040
- **Email**: care@cdhfinechemical.com

1.4 **Emergency telephone number**
- **Emergency Phone #**: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

### SECTION 2: Hazards identification

2.1 **Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**
- Acute toxicity, Oral (Category 4), H302
- Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 **Label elements**

**Labelling according Regulation (EC) No 1272/2008**

- **Pictogram**
- **Signal word**: Warning
- **Hazard statement(s)**
  - H302: Harmful if swallowed.
  - H411: Toxic to aquatic life with long lasting effects.
- **Precautionary statement(s)**
  - P273: Avoid release to the environment.
2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances
Formula: C₆H₄Cl₂
Molecular weight: 147.00 g/mol
CAS-No.: 541-73-1
EC-No.: 208-792-1
Index-No.: 602-067-00-7

Hazardous ingredients according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-Dichlorobenzene</td>
<td>Acute Tox. 4; Aquatic Chronic</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>541-73-1</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>208-792-1</td>
<td>2; H302, H411</td>
</tr>
<tr>
<td>Index-No.</td>
<td>602-067-00-7</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage
7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Combustible liquids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. 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.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineer protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
a) Appearance
   Form: liquid, clear
   Colour: colourless
b) Odour
   No data available
c) Odour Threshold
   No data available
d) pH
   No data available
e) Melting point/freezing point
   Melting point/range: -25 - -22 °C - lit.
f) Initial boiling point and boiling range
   172 - 173 °C - lit.
g) Flash point
   67.0 °C - closed cup
h) Evaporation rate
   No data available
i) Flammability (solid, gas)
   No data available
j) Upper/lower flammability or explosive limits
   No data available
k) Vapour pressure
   No data available
l) Vapour density
   No data available
m) Relative density
   1.288 g/cm3 at 25 °C
n) Water solubility
   No data available
o) Partition coefficient: n-octanol/water
   log Pow: 5
p) Auto-ignition temperature
   No data available
q) Decomposition temperature
   No data available
r) Viscosity
   No data available
s) Explosive properties
   No data available
t) Oxidizing properties
   No data available

9.2 Other safety information
No data available
SECTION 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Heat, flames and sparks.

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Intraperitoneal - Mouse - 1,062 mg/kg(1,3-Dichlorobenzene)

Skin corrosion/irritation
No data available(1,3-Dichlorobenzene)

Serious eye damage/eye irritation
No data available(1,3-Dichlorobenzene)

Respiratory or skin sensitisation
No data available(1,3-Dichlorobenzene)

Germ cell mutagenicity
No data available(1,3-Dichlorobenzene)

Carcinogenicity
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1,3-Dichlorobenzene)

Reproductive toxicity
No data available(1,3-Dichlorobenzene)

Specific target organ toxicity - single exposure
No data available(1,3-Dichlorobenzene)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available(1,3-Dichlorobenzene)

Additional Information
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(1,3-Dichlorobenzene)
SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 7.8 mg/l - 96.0 h(1,3-Dichlorobenzene)
Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 1.7 mg/l - 48 h(1,3-Dichlorobenzene)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
Bioaccumulation Pimephales promelas (fathead minnow) - 32 d - 0.3 mg/l(1,3-Dichlorobenzene)
Bioconcentration factor (BCF): 97

12.4 Mobility in soil
No data available(1,3-Dichlorobenzene)

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
ADR/RID: 3082 IMDD: 3082 IATA: 3082

14.2 UN proper shipping name
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,3-Dichlorobenzene)
IMDD: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,3-Dichlorobenzene)
IATA: Environmentally hazardous substance, liquid, n.o.s. (1,3-Dichlorobenzene)

14.3 Transport hazard class(es)
ADR/RID: 9 IMDD: 9 IATA: 9

14.4 Packaging group
ADR/RID: III IMDD: III IATA: III
14.5 Environmental hazards
ADR/RID: yes  IMDG Marine pollutant: no  IATA: yes

14.6 Special precautions for user
No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.
H302  Harmful if swallowed.
H411  Toxic to aquatic life with long lasting effects.

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.