



<b>CHLORO BENZENE</b> <b>CAS No 108-90-7</b>	<b>MATERIAL SAFETY DATA SHEET</b> <b>SDS/MSDS</b>
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifiers**

Product name : Chloro Benzene

CAS-No. : 108-90-7

**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  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto: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**

Flammable liquids (Category 3), H226  
Acute toxicity, Inhalation (Category 4), H332  
Skin irritation (Category 2), H315  
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)

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H332	Harmful if inhaled.

H411	Toxic to aquatic life with long lasting effects.
Precautionary statement(s) P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 P370 + P378	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. In case of fire: Use dry powder or dry sand to extinguish.
Supplemental Hazard Statements	none

### 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	:	C <sub>6</sub> H <sub>5</sub> Cl
Molecular weight	:	112.56 g/mol
CAS-No.	:	108-90-7
EC-No.	:	203-628-5
Index-No.	:	602-033-00-1

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

Component		Classification	Concentration
<b>Chlorobenzene</b>			
CAS-No.	108-90-7	Flam. Liq. 3; Acute Tox. 4;	<= 100 %
EC-No.	203-628-5	Skin Irrit. 2; Aquatic Chronic 2;	
Index-No.	602-033-00-1	H226, , H332, H315, H411	

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).

### 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): Flammable 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, Flame retardant antistatic protective clothing., 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 enginee 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                                                |
| b) Odour                                        | No data available                                                  |
| c) Odour Threshold                              | No data available                                                  |
| d) pH                                           | neutral                                                            |
| e) Melting point/freezing point                 | Melting point/range: -45 °C - lit.                                 |
| f) Initial boiling point and boiling range      | 132 °C - lit.                                                      |
| g) Flash point                                  | 27.0 °C - closed cup                                               |
| h) Evaporation rate                             | No data available                                                  |
| i) Flammability (solid, gas)                    | No data available                                                  |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 7.1 %(V)<br>Lower explosion limit: 1.3 %(V) |
| k) Vapour pressure                              | 11.8 mmHg at 25.0 °C                                               |
| l) Vapour density                               | No data available                                                  |
| m) Relative density                             | 1.105-1.108 g/cm <sup>3</sup> at 20 °C                             |
| n) Water solubility                             | 0.207 g/l at 20 °C                                                 |
| o) Partition coefficient: n-octanol/water       | log Pow: 2.89                                                      |
| p) Auto-ignition temperature                    | 637.0 °C                                                           |
| 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

Solubility in other solvents	Alcohol - soluble Benzene - soluble Chloroform - soluble Ether - soluble
Surface tension	33.0 mN/m at 25.0 °C

## 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

Inhalation: No data available(Chlorobenzene)

#### Skin corrosion/irritation

Skin - Rabbit(Chlorobenzene)

Result: Irritating to skin. - 4 h

(OECD Test Guideline 404)

Remarks: No data available

#### Serious eye damage/eye irritation

Eyes - Rabbit(Chlorobenzene)

Result: No eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

No data available(Chlorobenzene)

#### Germ cell mutagenicity

No data available(Chlorobenzene)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Chlorobenzene)

#### Specific target organ toxicity - single exposure

No data available(Chlorobenzene)

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available(Chlorobenzene)

**Additional Information**

RTECS: CZ0175000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Chlorobenzene)

(Chlorobenzene)

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish	LC100 - Leuciscus idus (Golden orfe) - 0.03 - 28 mg/l - 48.0 h(Chlorobenzene)
	LC50 - Cyprinodon variegatus (sheepshead minnow) - 10 mg/l - 96.0 h(Chlorobenzene)
	LC50 - Lepomis macrochirus (Bluegill) - 4.5 - 7.4 mg/l - 76.0 h(Chlorobenzene)
	NOEC - Cyprinodon variegatus (sheepshead minnow) - 6.2 mg/l - 96.0 h(Chlorobenzene)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 4.30 - 16.00 mg/l - 24 h(Chlorobenzene)
	EC50 - No information available. - 7.60 mg/l - 24 h(Chlorobenzene)
	NOEC - Daphnia magna (Water flea) - < 1.4 mg/l - 11 d(Chlorobenzene)
	LC50 - Daphnia magna (Water flea) - 10.7 mg/l - 48 h(Chlorobenzene)
Toxicity to algae	EC50 - No information available. - 235.00 mg/l - 48 h(Chlorobenzene)
	EC50 - Pseudokirchneriella subcapitata (green algae) - 12.50 mg/l - 96 h(Chlorobenzene)

**12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d(Chlorobenzene)  
Result: 15 % - Not readily biodegradable.  
(OECD Test Guideline 301F)

**12.3 Bioaccumulative potential**

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d  
- 0.05 mg/l(Chlorobenzene)  
  
Bioconcentration factor (BCF): 75

**12.4 Mobility in soil**

No data available(Chlorobenzene)

**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.

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable.  
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: 1134

IMDG: 1134

IATA: 1134

### 14.2 UN proper shipping name

ADR/RID: CHLOROBENZENE

IMDG: CHLOROBENZENE

IATA: Chlorobenzene

### 14.3 Transport hazard class(es)

ADR/RID: 3

IMDG: 3

IATA: 3

### 14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 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.

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H332 Harmful if inhaled.

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](http://www.cdhfinechemical.com) for additional terms and conditions of sale.