



**Carbon Tetra Chloride  
CAS No 56-23-5**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

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

**1.1 Product identifiers**

Product name : Carbon Tetra Chloride

CAS-No. : 56-23-5

**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-10002  
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**

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin sensitisation (Sub-category 1B), H317

Carcinogenicity (Category 2), H351

Specific target organ toxicity - repeated exposure (Category 1), H372

Chronic aquatic toxicity (Category 3), H412

Hazardous to the ozone layer (Category 1), H420

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

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

		R40
T	Toxic	R23/24/25, R48/23
N	Dangerous for the environment	R59
		R52/53
Xi	Irritant	R43

For the full text of the R-phrases mentioned in this Section, see Section 16.

## 2.2 Label elements

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

Pictogram



Signal word

Danger Acute toxicity Aspiration hazard

Hazard statement(s)

H301 + H311 + H331

H317

H351

H372

H412

H420

Toxic if swallowed, in contact with skin or if inhaled

May cause an allergic skin reaction.

Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

Harms public health and the environment by destroying ozone in the upper atmosphere.

Precautionary statement(s)

P261

P273

P280

P301 + P310 + P330

P403 + P233

P502

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.

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

Refer to manufacturer/ supplier for information on recovery/ recycling.

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. Rapidly absorbed through skin.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Tetrachloromethane

Formula : CCl<sub>4</sub>

Molecular weight : 153,82 g/mol

CAS-No. : 56-23-5

EC-No. : 200-262-8

Index-No. : 602-008-00-5

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

Component	Classification	Concentration
<b>Tetrachloromethane</b>		
CAS-No.	56-23-5	Acute Tox. 3; Skin Sens. 1B;
EC-No.	200-262-8	Carc. 2; STOT RE 1; Aquatic
Index-No.	602-008-00-5	Chronic 3; Ozone 1; H301 + H311 + H331, H317, H351, H372, H412, H420

#### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
<b>Tetrachloromethane</b>		
CAS-No.	56-23-5	T, N, Carc.Cat.3, R23/24/25 -
EC-No.	200-262-8	R40 - R43 - R48/23 - R59 -
Index-No.	602-008-00-5	R52/53

For the full text of the H-Statements and R-Phrases 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. Take victim immediately to hospital. Consult a physician.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

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**

No data available

## **SECTION 6: Accidental release measures**

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

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe 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**

Soak up with inert absorbent material and dispose of as hazardous waste. 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.

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): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

## 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

Components with workplace control parameters

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### 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 a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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<br>Colour: colourless |
| b) Odour                                   | sweet                              |
| c) Odour Threshold                         | No data available                  |
| d) pH                                      | No data available                  |
| e) Melting point/freezing point            | Melting point/range: -23 °C - lit. |
| f) Initial boiling point and boiling range | 76 - 77 °C - lit.                  |
| g) Flash point                             | does not flash                     |
| 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                              | 45 hPa at 0,3 °C<br>120 hPa at 19,8 °C<br>14.549 hPa at 24 °C |
| l) | Vapour density                               | No data available   |
| m) | Relative density                             | 1,594 g/cm <sup>3</sup> at 25 °C                              |
| n) | Water solubility                             | 0,8461 g/l at 20 °C   |
| o) | Partition coefficient: n-octanol/water       | log Pow: 2,83 at 25 °C  |
| 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

Surface tension	26,7 mN/m at 20 °C 19,5 mN/m at 80 °C
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## 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

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

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 Oral - Rat - 2.350 mg/kg

LC50 Inhalation - Rat - 4 h - 8000 ppm

LD50 Dermal - Rabbit - > 20.000 mg/kg

#### Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h  
(Draize Test)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Mild eye irritation - 24 h

(Draize Test)

**Respiratory or skin sensitisation**

- Mouse

Result: The product is a skin sensitiser, sub-category 1B.

(OECD Test Guideline 429)

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Tetrachloromethane)

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

Inhalation - Causes damage to organs through prolonged or repeated exposure. - Liver, Kidney

**Aspiration hazard**

No data available

**Additional Information**

RTECS: FG4900000

Vomiting, Diarrhoea, Abdominal pain, Nausea, Dizziness, Headache, Damage to the eyes., Liver injury may occur., Kidney injury may occur., Exposure to and/or consumption of alcohol may increase toxic effects., Contact with skin can cause:, Pain, Erythema, hyperemia

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

Toxicity to fish mortality LC50 - Danio rerio (zebra fish) - 24,3 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates Immobilization EC50 - Daphnia magna (Water flea) - 35 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae Growth inhibition EC50 - Algae - 20 mg/l - 72 h (OECD Test Guideline 201)

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

Bioaccumulation Lepomis macrochirus (Bluegill) - 21 d - 52,3 µg/l

Bioconcentration factor (BCF): 30

**12.4 Mobility in soil**

No data available

## 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

Harmful to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

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: 1846

IMDG: 1846

IATA: 1846

### 14.2 UN proper shipping name

ADR/RID: CARBON TETRACHLORIDE

IMDG: CARBON TETRACHLORIDE

IATA: Carbon tetrachloride

### 14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: yes

IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Tetrachloromethane

CAS-No.: 56-23-5

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Exempted (Categories of) Uses: industrial chemical for public use

Tetrachloromethane

CAS-No.: 56-23-5

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

Ozone depletion potential; ODP; (R-11 = 1): 1,1

### 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.

Acute Tox.	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
Carc.	Carcinogenicity
H301	Toxic if swallowed.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

**Full text of R-phrases referred to under sections 2 and 3**

N	Dangerous for the environment
T	Toxic
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R59	Dangerous for the ozone layer.

**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.