

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name : Carbon tetrachloride

CAS-No. : 56-23-5

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

Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Carcinogenicity (Category 2)

Acute toxicity, Inhalation (Category 3)

Acute toxicity, Dermal (Category 3)

Acute toxicity, Oral (Category 3)

Specific target organ toxicity - repeated exposure (Category 1)

Chronic aquatic toxicity (Category 3)

Hazardous to the ozone layer

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

Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of serious damage to health by prolonged exposure through inhalation. Limited evidence of a carcinogenic effect. Dangerous for the ozone layer. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word : Danger

Hazard statement(s)

H301 : Toxic if swallowed.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H351 : Suspected of causing cancer.

H372 : Causes damage to organs through prolonged or repeated exposure.

H412 : Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P273 : Avoid release to the environment.

P280 : Wear protective gloves/ protective clothing.

P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P311 : Call a POISON CENTER or doctor/ physician.

P501 : Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard information (EU)

EUH059 : Hazardous to the ozone layer.

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrase(s)

R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.

R40 : Limited evidence of a carcinogenic effect.

R48/23 : Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R59 : Dangerous for the ozone layer.

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S23 : Do not breathe gas/fumes/vapour/spray.

S36/37 : Wear suitable protective clothing and gloves.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S59 : Refer to manufacturer/supplier for information on recovery/recycling.

S61 : Avoid release to the environment. Refer to special instructions/ Safety data sheets.

2.3 Other hazards

Rapidly absorbed through skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Tetrachloromethane

Formula : CCl₄

Molecular Weight : 153,82 g/mol

Component : Concentration

Tetrachloromethane

CAS-No. : 56-23-5

EC-No. : 200-262-8

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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

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

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

5.3 Advice for fire fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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.

7.3 Specific end uses

no data available

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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

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).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance : Form: liquid

b) Odour : no data available

c) Odour Threshold : no data available

d) pH : no data available

e) Melting point/freezing point : Melting point/range: -23 °C

f) Initial boiling point and boiling range : 76 - 77 °C

g) Flash point : not applicable

h) Evaporation rate : no data available

i) Flammability (solid, gas) : no data available

j) Upper/lower flammability limits : no data available

k) Vapour pressure : 121,3 hPa at 20,0 °C

l) Vapour density : 190,7 hPa at 30,0 °C

m) Relative density : no data available

n) Water solubility : no data available

o) Octanol/water partition coefficient: n-octanol/water : log Pow: 2,83 log Pow: 5

p) Autoignition temperature : no data available

q) Decomposition : no data available

r) Viscosity : no data available

s) Explosive properties : no data available

t) Oxidizing properties : no data available

u) Specific conductance : no data available

v) pH of aqueous solution : no data available

w) Viscosity of aqueous solution : no data available

x) Autoignition temperature of aqueous solution : no data available

y) Viscosity of aqueous solution of 1% : no data available

z) Viscosity of aqueous solution of 10% : no data available

aa) Viscosity of aqueous solution of 50% : no data available

bb) Viscosity of aqueous solution of 90% : no data available

cc) Viscosity of aqueous solution of 95% : no data available

dd) Viscosity of aqueous solution of 98% : no data available

ee) Viscosity of aqueous solution of 99% : no data available

ff) Viscosity of aqueous solution of 99.5% : no data available

gg) Viscosity of aqueous solution of 99.9% : no data available

hh) Viscosity of aqueous solution of 99.99% : no data available

ii) Viscosity of aqueous solution of 99.999% : no data available

jj) Viscosity of aqueous solution of 99.9999% : no data available

kk) Viscosity of aqueous solution of 99.99999% : no data available