

CAS No: 56-23-5 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Mixture

:

CAS No : 56-23-5
Product code : 00070
Formula : CCl4

Synonyms : Tetrachloromethane

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

CHEMIECALL

Jl. Diklat Pemda, Dukuh Pinang No. 24 RT.001/003 Kel. Bojong Nangka Kec. Kelapa Dua Tangerang 15821

Contact: +62(21) 54210228

info@chemiecall.com www.chemiecall.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40 T; R23/24/25 T; R48/23 N; R59 R52/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. **Label elements**

Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols





T - Toxic

Ν-Dangerous for the environment

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

R40 - Limited evidence of a carcinogenic effect

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

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

aquatic environment

R59 - Dangerous for the ozone layer

: S23 - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified S-phrases

by the manufacturer)

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

No additional information available

SECTION 3: Composition/information on ingredients

Substance 3.1.

Not applicable

Mixture 3.2.

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

SECTION 4: First aid measures

Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get

medical advice/attention.

First-aid measures after eye contact Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

: Rinse mouth out with water. If you feel unwell, seek medical advice. First-aid measures after ingestion

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

Symptoms/injuries : Causes damage to organs through prolonged or repeated exposure.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing

significant health hazard. Toxic in contact with skin.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious

health hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use extinguishing media containing water.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

6.2. Environmental precautions

Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills

with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Molecular mass : 153.82 g/mol Colour : Clear Colorless.

Odour : chloroform-like.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : 12.8

Melting point : -23 °C

Freezing point : No data available

Boiling point : 76 - 77

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : 100 °C

Flammability (solid, gas) : No data available

Vapour pressure : 121.3 hPa at 20°C

Relative vapour density at 20 °C : 5.31

Relative density : No data available

Density : 1.59 g/cm³
Solubility : Water: Insoluble

Log Pow : 2.83

Viscosity, kinematic : No data available
Viscosity, dynamic : 0.97 Pa.s 20 °C

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Toxic by inhalation, in contact with skin and if swallowed.

Irritation : Not classified
Corrosivity : Not classified
Sensitisation : Not classified

Repeated dose toxicity : Toxic: danger of serious damage to health by prolonged exposure through

inhalation.

Carcinogenicity : Limited evidence of a carcinogenic effect.

Mutagenicity : Not classified
Toxicity for reproduction : Not classified

Potential adverse human health effects

and symptoms

: Toxic if swallowed. Toxic in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - air : Dangerous for the ozone layer.

Ecology - water : Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

CARBON TETRACHLORIDE AR (56-23-5)

Persistence and degradability

May cause long-term adverse effects in the environment.

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12.3. Bioaccumulative potential

CARBON TETRACHLORIDE AR (56-23-5)

Log Pow 2.83

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal

Ecology - waste materials

: Dispose of contents/container to ...

recommendations

: Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1846 UN-No. (IMDG) : 1846 UN-No.(IATA) : 1846 UN-No.(ADN) : 1846 UN-No. (RID) : 1846

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CARBON TETRACHLORIDE
Proper Shipping Name (IMDG) : CARBON TETRACHLORIDE
Proper Shipping Name (IATA) : CARBON TETRACHLORIDE
Proper Shipping Name (ADN) : CARBON TETRACHLORIDE
Proper Shipping Name (RID) : CARBON TETRACHLORIDE

Transport document description (ADR) : UN 1846 CARBON TETRACHLORIDE, 6.1, II, (D/E)

Transport document description (IMDG) : UN 1846 CARBON TETRACHLORIDE, 6.1, II, MARINE POLLUTANT

Transport document description (IATA) : UN 1846 CARBON TETRACHLORIDE, 6.1, II
Transport document description (ADN) : UN 1846 CARBON TETRACHLORIDE, 6.1, II
Transport document description (RID) : UN 1846 CARBON TETRACHLORIDE, 6.1, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1 Danger labels (ADR) : 6.1



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IMDG

Transport hazard class(es) (IMDG) : 6.1 Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1 Hazard labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1 Danger labels (ADN) : 6.1



RID

Transport hazard class(es) (RID) : 6.1 Danger labels (RID) : 6.1



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : Yes (IMDG only)

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : T1

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Limited quantities (ADR) : 100ml Excepted quantities (ADR) : E4

Packing instructions (ADR) : P001, IBC02 Mixed packing provisions (ADR) : MP15

Portable tank and bulk container

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : L4BH
Tank special provisions (ADR) : TU15. TE19

Vehicle for tank carriage : AT Transport category (ADR) : 2

Special provisions for carriage - Loading,

unloading and handling (ADR)

Special provisions for carriage - Operation : S9, S19

(ADR)

Hazard identification number (Kemler No.) : 60

Orange plates

60

: CV13, CV28

: T7

: TP2

1846

Tunnel restriction code (ADR) : D/E EAC code : 2Z

- Transport by sea

: 100 ml Limited quantities (IMDG) Excepted quantities (IMDG) : E4 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP2 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-A Stowage category (IMDG) : A : SW2 Stowage and handling (IMDG) MFAG-No : 151

- Air transport

PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y641
PCA limited quantity max net quantity : 1L

(IATA)

PCA packing instructions (IATA) : 654
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 661
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 6L

- Inland waterway transport

Classification code (ADN) : T1

Special provisions (ADN) : 802

Limited quantities (ADN) : 100 ml

Excepted quantities (ADN) : E4

Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP, TOX, A

Ventilation (ADN) : VE02

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Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : T1
Limited quantities (RID) : 100ml
Excepted quantities (RID) : E4

Packing instructions (RID) : P001, IBC02

Mixed packing provisions (RID) : MP15
Portable tank and bulk container : T7

instructions (RID)

Portable tank and bulk container special : TP2

provisions (RID)

Tank codes for RID tanks (RID) : L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2

Special provisions for carriage – Loading : CW13, CW28, CW31

and unloading (RID)

Colis express (express parcels) (RID) : CE5
Hazard identification number (RID) : 60

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according

to AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct

contact with the product

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

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15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-. H- and EUH-phrases:

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
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R59	Dangerous for the ozone layer
N	Dangerous for the environment
Т	Toxic

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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