

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

SECTION 2: Hazards identification


2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids Category 2
H225 Highly flammable liquid and vapour.
Skin irritation Category 2
H315 Causes skin irritation.
Eye irritation Category 2
H319 Causes serious eye irritation.
Acute toxicity Category 4 - Inhalation
H332 Harmful if inhaled.
Reproductive toxicity Category 2
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure Category 1
H372 Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	:	P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves/protective clothing/eye protection/face protection.

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

P284	In case of inadequate ventilation wear respiratory protection.
P302 + P352 P304 + P340	IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

2.3. Other hazards

Inhalation may cause central nervous system effects.

SECTION 3: Composition/information on ingredients

3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
carbon disulphide	75-15-0 006-003-00-3 200-843-6	Flam. Liq. 2; H225 Acute Tox. 4; H332; Inhalation Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361fd STOT RE 1; H372	100 %	STOT RE 2; H373:0,2 - < 1 % Repr. 2; H361fd:>= 1 % STOT RE 1; H372:>= 1 %

3.2. Mixture

Not applicable

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Occupational Exposure Limit(s), if available, are listed in Section 8.
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:

First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:

If inhaled, remove to fresh air. Call a physician immediately.

Skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Call a physician if irritation develops or persists.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion:

Rinse mouth, ingest activated charcoal. Do NOT induce vomiting. Call a physician immediately.

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

No data available

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

No data available

See Section 11 for more detailed information on health effects and symptoms.

:

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Extinguishing media which shall not be used for safety reasons:

High volume water jet

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.
Fire may cause evolution of:
Sulphur oxides
Carbon oxides

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Provide adequate ventilation.

6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

Exhaust ventilation at the object is necessary.

Advice on protection against fire and explosion:

Use only in explosion-proof areas. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Vapours may form explosive mixtures with air. Normal measures for preventive fire protection.

Hygiene measures:

Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

no additional data available

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
carbon disulphide	EH40 WEL SKIN_DES			Can be absorbed through the skin.
carbon disulphide	EH40 WEL TWA	15 mg/m3 5 ppm		
carbon disulphide	EU ELV TWA	15 mg/m3 5 ppm		Indicative
carbon disulphide	EU ELV SKIN_DES			Can be absorbed through the skin.

SKIN_DES - Skin designation:
TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
carbon disulphide	Workers / Long-term systemic effects		15,8 mg/m3	Inhalation	
carbon disulphide	Workers / Acute systemic effects		48 mg/m3	Inhalation	
carbon disulphide	Consumers / Long-term systemic effects		1,88 mg/m3	Inhalation	
carbon disulphide	Consumers / Long-term systemic effects		0,2mg/kg bw/d	Ingestion	

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Component	Environmental compartment / Value	Remarks
carbon disulphide	Fresh water: 0,01 mg/l	Assessment factor: 100
carbon disulphide	Marine water: 0,001 mg/l	Assessment factor: 1000
carbon disulphide	Sewage treatment plant: 0,13 mg/l	Assessment factor: 100
carbon disulphide	Fresh water sediment: 0,07 mg/kg dw	
carbon disulphide	Marine sediment: 0,007 mg/kg dw	
carbon disulphide	Soil: 0,0081 mg/kg dw	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Do not breathe vapours or spray mist.

Engineering measures

Local exhaust

Take measures to prevent the build up of electrostatic charge.

Personal protective equipment

Respiratory protection:

In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection:

Glove material: Viton®

Break through time: < 480 min

Glove thickness: 0,7 mm

Vitoject® 890

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Remarks: Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.
Manufacturer's directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Flame retardant antistatic protective clothing.

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	colourless
Odour	:	unpleasant
molecular weight	:	76,14 g/mol
Melting point/range	:	< -76 °C Method: OECD Test Guideline 102
Boiling point/boiling range	:	42,2 °C at 997 hPa Method: OECD Test Guideline 103
Boiling point/boiling range	:	46 °C at 1.013 hPa

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Flash point	:	-30 °C
Decomposition temperature	:	No decomposition if used as directed.
pH	:	No data available
Auto-ignition temperature	:	102 °C Method: 92/69/EEC, A.15
Viscosity, kinematic	:	No data available
Water solubility	:	2,9 g/l at 20 °C Method: OECD Test Guideline 105
Partition coefficient: n-octanol/water	:	log Pow 2,7 at: 25 °C Method: OECD Test Guideline 107
Vapour pressure	:	27,4 hPa at 25 °C Method: OECD Test Guideline 104
Density	:	1,264 g/cm ³ at 20 °C Method: OECD Test Guideline 109
Relative vapour density	:	No data available

9.2 Other Information

Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Oxidizing agents
Alkali metals

10.6. Hazardous decomposition products

Sulfur oxides (SO_x)
Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

LD50

Species: Rat

Value: > 2.000 mg/kg

Method: OECD 423

Acute dermal toxicity:

No data available

Acute inhalation toxicity:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Honeywell
Riedel-de Haën™

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

LC50

Species: Rat

Value: 10,35 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Skin irritation:

Classification based on Annex VI of regulation 1272/2008/EC.

Eye irritation:

Classification based on Annex VI of regulation 1272/2008/EC.

Respiratory or skin sensitisation:

Mouse local lymph node assay

Species: Mouse

Result: non-sensitizing

Method: OECD Test Guideline 429

Repeated dose toxicity:

Note: Classification based on Annex VI of regulation 1272/2008/EC.

Carcinogenicity:

Note: Not classified due to data which are conclusive although insufficient for classification.

Germ cell mutagenicity:

Note: Not classified due to data which are conclusive although insufficient for classification.

Reproductive toxicity:

Method: OECD Test Guideline 414

Species: Rabbit

Remarks: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Aspiration hazard:

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information:

No data available

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:

LC50

semi-static test

Species: Danio rerio (zebra fish)

Value: 3 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

LC50

semi-static test

Species: Poecilia reticulata (guppy)

Value: 4 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to aquatic plants:

EC50

Growth rate

Species: Chlorella pyrenoidosa (algae)

Value: 21 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Toxicity to aquatic invertebrates:

LC50

Species: Daphnia (water flea)

Value: 2,1 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 202

12.2. Persistence and degradability

Biodegradability:

Biodegradation: > 80 %

Exposure time: 28 d

Result: Readily biodegradable.

Method: OECD 301 D

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Dispose according to legal requirements.

Packaging:

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:

Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number

ADR/RID:1131

IMDG:1131

IATA:1131

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

14.2 UN proper shipping name

ADR/RID: CARBON DISULPHIDE
IMDG: CARBON DISULPHIDE

14.3 Transport hazard class(es)

ADR/RID: 3 (6.1) IMDG: 3 (6.1)

14.4 Packaging group

ADR/RID: I IMDG: I

14.5 Environmental hazards

ADR/RID: no Marine pollutant: no

14.6 Special precautions for user

No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Directive 2012/18/EC Listed in Regulation : P5c: FLAMMABLE LIQUIDS	Quantity: 5.000.000 kg Quantity: 50.000.000 kg	
Directive 2012/18/EC Listed in Regulation : H3: Specific target organ toxicity	Quantity: 50.000 kg Quantity: 200.000 kg	
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).

Poison Control Center

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
Munich : 089/19240	
Latvia	+37167042473

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420 112 (begär Giftinformation);+46104566786
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111

Other inventory information

US. Toxic Substances Control Act
On TSCA Inventory

Australia. Industrial Chemicals Act (AIC), as amended

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List

On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)

On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

carbon disulphide : H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

Carbon disulfide

31627-6X1L

Version 1.3

Revision Date 13.04.2022

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very bioaccumulative substance
PBT Persistent, bioaccumulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.
