

Carbon disulfide

180173-1L

Version 1.1 Revision Date 08/23/2018 Print Date 06/01/2023

SECTION 1. IDENTIFICATION

Product name : Carbon disulfide

Number : 00000020250

Product Use Description : Laboratory chemicals

Manufacturer or supplier's

details

Honeywell Specialty Chemicals Seelze

GmbH

Wunstorfer Straße 40 Seelze, 30926

For more information call : 1-800-368-0050

+1-231-726-3171

(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414

Transportation (CHEMTREC): 1-800-424-9300 or

+1-703-527-3887

: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form : liquid

Color : colourless

Odor : unpleasant

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Classification of the substance or mixture

Classification of the substance : Flammable liquids, Category 2

or mixture

Acute toxicity, Category 4, Inhalation

Skin irritation, Category 2 Eye irritation, Category 2A Reproductive toxicity, Category 2

Specific target organ toxicity - repeated exposure, Category 1,

Nervous system, Cardio-vascular system

GHS Label elements, including precautionary statements

Symbol(s)







Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.

> Causes skin irritation. Causes serious eye irritation.

Harmful if inhaled.

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated

exposure.

Precautionary statements : Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and

understood.

Keep away from heat/sparks/open flames/hot surfaces. No

smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.



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Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal:

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

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : CS2

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Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Carbon Disulfide	75-15-0	100.00 %

SECTION 4. 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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

Foam

Carbon dioxide (CO2)

Dry powder

Unsuitable extinguishing

media

: Do not use a solid water stream as it may scatter and spread

fire.

Specific hazards during

firefighting

: Highly flammable.

Vapours may form explosive mixtures with air.

Vapours are heavier than air and may spread along floors. Vapors may travel to areas away from work site before

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igniting/flashing back to vapor source.

Fire may cause evolution of:

Carbon monoxide Carbon dioxide (CO2) Sulphur oxides

Special protective equipment

for firefighters

: Wear an approved positive pressure self-contained breathing

apparatus in addition to standard fire fighting gear.

Further information : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.

Wear personal protective equipment. Unprotected persons

must be kept away.

Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions

: Should not be released into the environment.

Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning

up

: Ventilate the area.

Do not use sparking tools.

Use explosion-proof equipment.

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national

regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe

handling

Wear personal protective equipment.

Use only in well-ventilated areas.

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Advice on protection against :

fire and explosion

Keep product and empty container away from heat and sources

of ignition.

No smoking.

Take precautionary measures against static discharges.

Vapours may form explosive mixtures with air.

Storage

Conditions for safe storage,

including any incompatibilities

Store in area designed for storage of flammable liquids. Protect

from physical damage.

Keep containers tightly closed in a dry, cool and well-ventilated

place.

Store in original container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to

the workstation location.

Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.

Do not breathe vapours or spray mist.

Engineering measures : Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during

and after use.

Eye protection : Safety goggles

Hand protection : Impervious gloves

Gloves must be inspected prior to use.

Replace when worn.

Skin and body protection : Flame retardant antistatic protective clothing.

Respiratory protection : In case of insufficient ventilation wear suitable respiratory

equipment.

Hygiene measures : Take off all contaminated clothing immediately.

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> 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.

Exposure Guidelines						
Components	CAS-No.	Value	Control parameters	Upda te	Basis	
Carbon Disulfide	75-15-0	TWA: Time weighted average	(1 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values	
		T =	Γ= .	T	I	
Carbon Disulfide	75-15-0	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	2008	ACGIH:US. ACGIH Threshold Limit Values	
Carbon Disulfide	75-15-0	REL: Recomm ended exposure limit (REL):	3 mg/m3 (1 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards	
Carbon Disulfide	75-15-0	STEL: Short term exposure limit	30 mg/m3 (10 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards	
Carbon Disulfide	75-15-0	SKIN_DE S : Skin designati on:	Can be absorbed through the skin.	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards	



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Carbon Disulfide	75-15-0	SKIN_FI NAL: Skin designati on (Final Rule Limit applies):	Can be absorbed through the skin.	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
Carbon Disulfide	75-15-0	TWA : Time weighted average	12 mg/m3 (4 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
Carbon Disulfide	75-15-0	STEL: Short term exposure limit	36 mg/m3 (12 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
Carbon Disulfide	75-15-0	TWA : Time weighted average	(20 ppm)	02 2006	OSHA/Z2:US. OSHA Table Z-2 (29 CFR 1910.1000)
Carbon Disulfide	75-15-0	MAX. CONC : Maximum concentr ation:	(100 ppm)	02 2006	OSHA/Z2:US. OSHA Table Z-2 (29 CFR 1910.1000)
Carbon Disulfide	75-15-0	Ceiling : Ceiling Limit Value:	(30 ppm)	02 2006	OSHA/Z2:US. OSHA Table Z-2 (29 CFR 1910.1000)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

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Color : colourless

Odor : unpleasant

Melting point/range : < -76 °C

Method: OECD Test Guideline 102

Boiling point/boiling range : 46 °C at 1,013 hPa

Flash point : -22 °F (-30 °C)

Lower explosion limit : Note: no data available

Upper explosion limit : Note: no data available

Vapor pressure : 27.4 hPa

at 25 °C(77 °F)Method: OECD Test Guideline 104

Density : 1.264 g/cm3 at 20 °C

Method: OECD Test Guideline 109

Water solubility : 2.9 g/l at 20 °C

Method: OECD Test Guideline 105

Partition coefficient: : log Pow: 2.7 at 25 °C

n-octanol/water Method: OECD Test Guideline 107

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Auto-ignition temperature : 102 °C

Method: 92/69/EEC, A.15

Decomposition temperature : Note: No decomposition if used as directed.

Molecular weight : 76.14 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

reactions

: Vapours may form explosive mixture with air. Hazardous polymerisation does not occur.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Alkali metals

Hazardous decomposition

products

: Fire may cause evolution of:

Carbon monoxide Carbon dioxide (CO2)

Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: > 2,000 mg/kg

Species: Rat

Method: OECD 423

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Acute inhalation toxicity : LC50: 10.35 mg/l , vapour

Exposure time: 4 h Species: Rat

Method: OECD Test Guideline 403

Acute dermal toxicity : Note: no data available

Skin irritation : Note: Classification based on Annex VI of regulation

1272/2008/EC.

Eye irritation : Note: Classification based on Annex VI of regulation

1272/2008/EC.

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.

Genotoxicity in vitro : Note: In vitro tests did not show mutagenic effects

Teratogenicity : Species: Rabbit

No observed adverse effect concentration: 300 ppm

No observed adverse effect concentration Parent: 600 ppm

Method: OECD Test Guideline 414

Result: Embryotoxic effects and adverse effects on the

offspring were detected.

SECTION 12. ECOLOGICAL INFORMATION

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Ecotoxicity effects

Toxicity to fish : semi-static test

> LC50: 3 mg/l Exposure time: 96 h

Species: Danio rerio (zebra fish) Method: OECD Test Guideline 203

: semi-static test LC50: 4 mg/l Exposure time: 96 h

Species: Poecilia reticulata (guppy) Method: OECD Test Guideline 203

Toxicity to daphnia and other : LC50: 2.1 mg/l

aquatic invertebrates

Exposure time: 96 h

Species: Daphnia (water flea) Method: OECD Test Guideline 202

Toxicity to algae : Growth rate

EC50: 21 mg/l Exposure time: 96 h

Species: Chlorella pyrenoidosa (aglae) Method: OECD Test Guideline 201

Elimination information (persistence and degradability)

Biodegradability : Result: Readily biodegradable.

Value: > 80 %

Method: OECD 301 D

Further information on ecology

Ecotoxicology Assessment

Results of PBT 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).



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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental

regulations.

SECTION 14. TRANSPORT INFORMATION

DOT UN/ID No. : UN 1131

Proper shipping name : CARBON DISULPHIDE

Class 3 Packing group I

Hazard Labels 3 (6.1)

IATA UN/ID No. : UN 1131

Class : 3

Not permitted for transport

IMDG UN/ID No. : UN 1131

Description of the goods : CARBON DISULPHIDE

Class : 3
Packaging group : I
Hazard Labels : 3 (6.1)
EmS Number : F-E, S-D
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

Inventories

US. Toxic Substances : On TSCA Inventory

Control Act

Australia. Industrial : On the inventory, or in compliance with the inventory

Chemical (Notification and

Assessment) Act

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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. The Toxic Substances and Hazardous and Nuclear Waste Control

Act

: On the inventory, or in compliance with the inventory

China. Inventory of Existing

Chemical Substances

: 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

National regulatory information

SARA 302 Components : The following components are subject to reporting levels

established by SARA Title III, Section 302:

: Carbon Disulfide 75-15-0

SARA 313 Components : The following components are subject to reporting levels

established by SARA Title III, Section 313:

: Carbon Disulfide 75-15-0

SARA 311/312 Hazards : Fire Hazard

> Acute Health Hazard Chronic Health Hazard

CERCLA Reportable

Quantity

: 100 lbs

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California Prop. 65

WARNING: This product can expose you to chemicals, listed below, known to the State of California to cause birth defects or other reproductive harm. For more information go to

www.P65Warnings.ca.gov.

Carbon Disulfide 75-15-0

Massachusetts RTK : Carbon Disulfide 75-15-0

New Jersey RTK : Carbon Disulfide 75-15-0

Pennsylvania RTK : Carbon Disulfide 75-15-0

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 4	4
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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.

Changes since the last version are highlighted in the margin. This version replaces all previous



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180173-1L Print Date 06/01/2023 Version 1.1 Revision Date 08/23/2018 versions. Previous Issue Date: 09/30/2016 Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group

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