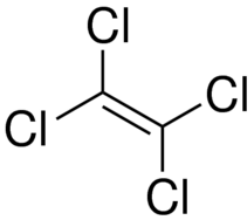
TETRACHLOROETHYLENE FOR UV SPECTROSCOPY

□□□□□□□□□

□□ (EU) 2020/878□ □□ □□□ REACH □□ (EC) 1907/2006□ □□
SDS Reference Number: 0301D
□□ □□□□: 4/9/2014 □□ □□□□: 2/3/2025 □□ □□: 4/15/2016 □□: 1.0

□□ 1: □□□□□ □□□ □□ □□

1.1. □□□□

□□ □□	:	□□
□□□	:	TETRACHLOROETHYLENE FOR UV SPECTROSCOPY
EC □□ □□	:	602-028-004
EC □□	:	204-825-9
CAS □□	:	127-18-4
□□ □□	:	0301D
□□ □□	:	Organic compound
□□□	:	C2Cl4
□□ □□	:	
□□□	:	Carbon bichloride; Carbon dichloride, Ethylene tetrachloride, Perchlor, Perchloroethene, / Perchloroethylene

1.2. □□□□ □□ □□□□ □□ □□ □□ □□

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□□□□/□□□□ □□	:	Laboratory chemicals, Manufacture of substances
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1.3. □□□□□□□□□ □□□ □□

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1.4. □□□□□□

□□ □□ □□	:	+ 91 22 6663 6663 (9:00am - 6:00 pm)

□□ 2: □□□·□□□

2.1. □□□·□□□ □□

Regulation (EC) No.1272/2008 [CLP]□ □□ □□

□□ □□□/□□ □□□, □□ 2	H315
□□□, □□ 2	H351
□□□□ □□□ – □□, □□ 2	H411

□□(H) □□ □ EUH □□ □□: 16□ □□.

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2.2. □□□□□□□□ □□□ □□□□ □□

□□ (EC) No. 1272/2008□ □□ □□ □□[CLP]

□□ □□ □□□□(CLP) :

GHS07 GHS08 GHS09

□□□ (CLP) : □□

□□·□□ □□ (CLP) : H315 - □□□ □□□ □□□.
H351 - □□ □□□ □□□ □□□.
H411 - □□□□ □□□ □□ □□□□□□ □□□.

□□ □□ □□(CLP) : P202 - □□ □□ □□□□ □□□ □□ □□□□ □□□ □□□□ □□□.
P273 - □□□□ □□□□ □□□.
P280 - □□□□, □□□, □□□, □□□□□ □(□) □□□□□.
P302+P352 - □□□ □□□ □□□ □ □ □□□□.
P308+P313 - □□□□□ □□□ □□□ □□: □□□ □□·□□□ □□□□.

2.3. □□ □□

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

□□ 3: □□□□□ □□ □ □□□

3.1. □□□□

□□ □□ : □□□□□□

□□	□□□□	%
TETRACHLOROETHYLENE	CAS □□: 127-18-4 EC □□: 204-825-9 EC □□ □□: 602-028-004	100

□□ 4: □□□□□□□

4.1. □□□□ □□

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□□□□ □ : □□□ □□□ □□ □□□ □□□ □□□□ □□ □□□ □□□ □□□□. Allow affected person to breathe fresh air. □□□ □□□□□ □□□ □□□ □□ □□□ □□□ □□□□ □□ □□□ □□□ □□□□. □□□□ □ □/□□□ □□□□.

□□□ □□□□ □ : □□ □□□□ □□/□□□ □□□□. Wash skin with plenty of water. □□□ □□□ □□□□. □□ □□□ □ □□□: □□□□ □□/□□□ □□□□.

□□ □□□□ □ : □ □□ □□ □□□□ □□□□. □□□□ □□□□□□ □□□□□. □□ □□□□. □□ □□□□ □□/□□□ □ □□□.

□□□ □ : □□ □□□□□. Do not induce vomiting. □□□□ □□/□□□ □□□□. □□□□ □□□ □□□□(□□)□ □ □□ □□□□.

First-aid measures for first aider : □□□□ □□□□ □□□ □□ □□ □□□ □□□□ □□□.

4.2. □□ □ □□□ □□ □□□ □□ □ □□

□□ □ □□/□□ : None under normal conditions.

□□ □□ □ □□/□□ : □□□ □□□ □□□. □□.

□ □□ □ □□/□□ : None under normal conditions.

□□ □ □□/□□ : None under normal conditions.

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4.3. □□□□ □□ □ □□ □□ □□ □□ □□

Treat symptomatically.

□□ 5: □□·□□□ □□□□

5.1. □□□ □□□

□□□ □□□ : Carbon dioxide. Dry powder. Foam. Water spray.

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

5.2. □□□□□□□ □□□ □□ □□□

□□ □□ : No fire hazard.

□□ □□ : No direct explosion hazard.

□□ □ □□□ □□□ □□ : Toxic fumes may be released.

5.3. □□□□ □□□□ □ □□□□

□□ □□ : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

□□ □□ □ □□ : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. □□□ □□□□□. Complete protective clothing.

□□ 6: □□□□□ □□□□

6.1. □□□ □□□□ □□ □□□ □□□□ □ □□□

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□□ □□ : Wear recommended personal protective equipment.

□□ □□ : Ventilate spillage area. Evacuate unnecessary personnel. □□ □ □□□ □□□ □□□□.

□□ □□ □□

□□ □□ : Do not attempt to take action without suitable protective equipment. □□□ □□ □□□□ □□□□□. □ □ □□□ □□□ □□ 8: "□□□□ □ □□□□□"□ □□□□□.

□□ □□ : Evacuate unnecessary personnel. □□□□ □□□□ □□ □□□□ □□□ □□□□.

6.2. □□□ □□□□ □□ □□□ □□□□

□□□□ □□□□ □□□.

6.3. □□ □□ □□ □□

□□□ : □□□□ □□□□. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

□□ □□ : Take up liquid spill into absorbent material. On land, sweep or shovel into suitable containers. □□□ □ □□□□. □□□ □□□ □□ □□□□□ □□□ □□ □□□ □□.

□ □□ □□□□ : Dispose of materials or solid residues at an authorized site.

6.4. □□ □□ □□

For further information refer to section 13.

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7.1. □□□□□□

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□□□□□□ : Ensure good ventilation of the work station. □□ □ □□□ □□□ □□□□. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. □□ □ □□ □□□□ □□□□ □. □□ □□ □□□□ □□□ □□ □□□□ □□□ □□□□ □□□. □□ □□□□ □□□□□.

□□ □□ : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. □□ □□ □ □□□ □□□ □□□□□. □ □□□ □□□ □□□ □□□, □□□□ □□ □□ □□□. Always wash hands after handling the product.

7.2. □□□□ □□□ □□□ □□□ □□ □□

□□□ □□ : Keep in a cool, well-ventilated place away from heat.

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□□□ : Store always product in container of same material as original container.

7.3. □□ □□ □□

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□□ 8: □□□□ □ □□□□□

8.1. □□ □□ □□

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8.2. □□□□

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□□□ □□□ □□:

Ensure good ventilation of the work station.

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□□ □□□:

Wear recommended personal protective equipment.

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□ □ □□ □□□

□ □□:

Chemical goggles or safety glasses

Skin protection

□□ □□:

Wear a mask

□ □□:

Protective gloves

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□□□ □□:

Wear appropriate mask

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□□ 9: □□□□□□ □□

9.1. □□□□ □□□□□□ □□□ □□ □□

□□□ □□ : □□

□□ : Colourless.

□□	:	Clear liquid.
□□□	:	165.85 g/mol
□□	:	mild. ethereal odor.
□□ □□	:	□□□□
□□□	:	□□□□
□□□	:	-22 °C
□□ □□□□ □□□ □□	:	121 °C
□□□	:	□□□
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□□□□ □□	:	□□□□
□□ □□	:	> 150 °C
pH	:	□□□□
□□(□□□)	:	0.548 mm²/s
□□(□□□□)	:	0.89 cP at 25 °C
□□□	:	□: 0.015 g/100ml - Immiscible with water □□□: Miscible with ethanol □□□: Miscible with ether
Partition coefficient n-octanol/water (Log Kow)	:	□□□□
Partition coefficient n-octanol/water (Log Pow)	:	3.4
□□□	:	14 mm Hg at 20°C
50°C□□□ □□□	:	□□□□
□□	:	1.623 g/cm³ at 20 °C
□□	:	□□□□
20°C□□□ □□ □□ □□	:	5.83 (Air = 1)
□□ □□	:	□□□□

9.2. □ □□ □□□□

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□□ □□ □□(□□□□□□□□=1)	:	0.33
□□□	:	1.5053 at 20 °C/D

□□ 10: □□□ □ □□□

10.1. □□□

The product is non-reactive under normal conditions of use, storage and transport.

10.2. □□□ □□□

Stable under normal conditions.

10.3. □□ □□□ □□□

No dangerous reactions known under normal conditions of use.

10.4. □□□ □ □□

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10.5. □□□ □ □□

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10.6. □□□ □□□□ □□□□

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

□□ 11: □□□□ □□ □□

11.1. □□ (EC) No 1272/2008□ □□□, □□□ □□□□ □□ □□

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□□ □□□	:	□□□□ □□

TETRACHLOROETHYLENE FOR UV SPECTROSCOPY (127-18-4)	
□□(□□□)	0.548 mm²/s

11.2. □□ □□ □□

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□□ 12: □□□ □□□ □□

12.1. □□

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□□ □□□□ □□□	:	□□□□ □□
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12.2. □□□ □ □□□

TETRACHLOROETHYLENE FOR UV SPECTROSCOPY (127-18-4)	
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12.3. □□ □□□

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12.4. □□ □□□

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12.5. PBT □ vPvB □□ □□

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12.6. □□□ □□ □□

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12.7. □□ □□ □□

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□□ 13: □□□ □□□□

13.1. □□□ □□□

□□ □□(□□□)	:	Disposal must be done according to official regulations.

□□□ □□□	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
□□ □□ □□ □□	:	Disposal must be done according to official regulations.
□□/□□ □□ □□□□	:	□□, □□, □□ □/□□ □□ □□□ □□ □□□□ □□ □□ □□□ □□ □□ □ □□□□ □□□ □□□□□. Disposal must be done according to official regulations.
□□ □□	:	Do not re-use empty containers.

□□ 14: □□□ □□□ □□

ADR / IMDG / IATA / ADN / RID□ □□

14.1. UN □□ □□ ID □□

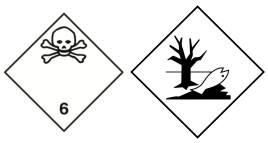
UN-□□(ADR)	:	UN 1897
UN-□□ (IMDG)	:	UN 1897
UN-□□(IATA)	:	UN 1897
UN-□□(ADN)	:	UN 1897
UN-□□(RID)	:	UN 1897

14.2. UN □□ □□□

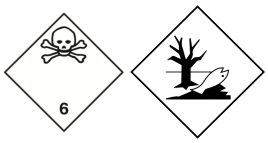
□□ □□□ (ADR)	:	□□□□□□□□□□
□□ □□□ (IMDG)	:	TETRACHLOROETHYLENE
□□ □□□ (IATA)	:	Tetrachloroethylene
□□ □□□ (ADN)	:	□□□□□□□□□□
□□ □□□ (RID)	:	□□□□□□□□□□
□□ □□ □□ (ADR) (ADR)	:	UN 1897 □□□□□□□□□□, 6.1, III, (E), □□□ □□
□□ □□ □□ (IMDG)	:	UN 1897 TETRACHLOROETHYLENE, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
□□ □□ □□ (IATA)	:	UN 1897 Tetrachloroethylene, 6.1, III, ENVIRONMENTALLY HAZARDOUS
□□ □□ □□ (ADN)	:	UN 1897 □□□□□□□□□□, 6.1, III, □□□ □□
□□ □□ □□ (RID)	:	UN 1897 □□□□□□□□□□, 6.1, III, □□□ □□

14.3. □□□□□ □□□ □□

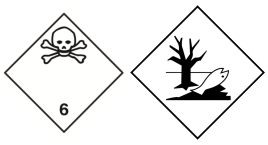
ADR

□□□□□ □□□ □□ (ADR)	:	6.1
□□ □□ (ADR)	:	6.1
	:	

IMDG

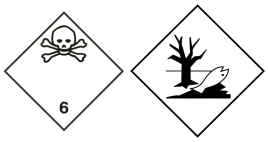
□□□□□ □□□ □□ (IMDG)	:	6.1
□□ □□ (IMDG)	:	6.1
	:	

IATA

□□□□□ □□□ □□ (IATA)	:	6.1
□□ □□ (IATA)	:	6.1
	:	

ADN

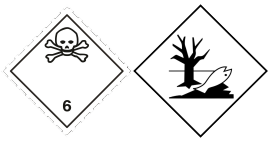
□□□□□ □□□ □□ (ADN)	:	6.1
□□ □□ (ADN)	:	6.1

: 

RID

□□□□□ □□□ □□ (RID) : 6.1

□□ □□ (RID) : 6.1

: 

14.4. □□□□

□□ □□ (ADR) : III

□□ □□(IMDG) : III

□□ □□ (IATA) : III

□□ □□(ADN) : III

□□ □□(RID) : III

14.5. □□ □□□

□□□ □□ : □□

□□□□□□ : □□

EmS-No. (□□) : F-A

EmS-No. (□□) : S-A

□ □□ □□□□ : □□ □□ □□ □□

14.6. □□□□ □□ □□ □□□□

□□ □□

□□ □□(ADR) : T1

□□□(ADR) : 5l

□□□(ADR) : E1

□□ □□(ADR) : P001, IBC03, LP01, R001

□□ □□ □□ □□ □□(ADR) : MP19

□□□ □□ □ □□ □□□□ □□ (ADR) : T4

□□□ □□ □ □□ □□□□ □□ □□ (ADR) : TP1

□□ □□(ADR) : L4BH

□□ □□ □□(ADR) : TU15, TE19

□□ □□□ □□ : AT

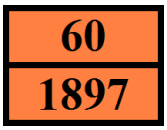
□□ □□(ADR) : 2

□□ □□ □□ □□ - □□(ADR) : V12

□□ □□ □□ □□ -□□, □□ □ □□(ADR) : CV13, CV28

□□ □□ □□ □□ - □□(ADR) : S9

□□ □□ □□(Kemler □□) : 60

Orange plates (□□□□□□) : 

□□ □□ □□ (ADR) : E

EAC □□ : 2Z

□□ □□

□□ □□(IMDG) : 5 L

□□□(IMDG) : E1

□□ □□ (IMDG) : P001, LP01

IBC □□ □□(IMDG) : IBC03

□□ □□ (IMDG) : T4

□□ □□ □□ (IMDG) : TP1

□□ □□ (IMDG) : A

□□ □ □□(IMDG) : SW2

□□(IMDG)	:	SGG10
□□□ □□□□ (IMDG)	:	Colourless liquid with an ethereal odour. When involved in a fire, evolves extremely toxic fumes (phosgene). Toxic if swallowed, by skin contact or by inhalation.
MFAG-□□	:	160

□□ □□

PCA □□ □□(IATA)	:	E1
PCA □□ □□(IATA)	:	Y642
PCA □□ □□ □□ □□□(IATA)	:	2L
PCA □□ □□(IATA)	:	655
PCA □□ □□□(IATA)	:	60L
CAO □□ □□(IATA)	:	663
CAO □□ □□□(IATA)	:	220L
ERG □□(IATA)	:	6L

□□ □□ □□

□□ □□(ADN)	:	T1
□□ □□(ADN)	:	802
□□□(ADN)	:	5 L
□□□(ADN)	:	E1
□□□□(ADN)	:	T
□□ □□(ADN)	:	PP, EP, TOX, A
□□(ADN)	:	VE02
□□ □□/□□□ □□(ADN)	:	0

□□ □□

□□ □□(RID)	:	T1
□□ □□(RID)	:	5L
□□□(RID)	:	E1
□□ □□ (RID)	:	P001, IBC03, LP01, R001
□□ □□ □□ □□ □□(RID)	:	MP19
□□□ □□ □ □□ □□□□ □□ (RID)	:	T4
□□□ □□ □ □□ □□□□ □□ □□ (RID)	:	TP1
RID □□□ □□ □□(RID)	:	L4BH
RID □□□ □□ □□(RID)	:	TU15
□□ □□(RID)	:	2
□□ □□ □□ □□ - □□(RID)	:	W12
□□ □□ □□ □□ -□□, □□ □ □□(RID)	:	CW13, CW28, CW31
□□ □□□	:	CE8
□□□ □□ □□ (RID)	:	60

14.7. □□□□□□□(IMO)□ □□ □□ □□ □□

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□□ 15: □□ □□□□

15.1. □□, □□ □ □□□ □□□□ □□□□ □□ □□□□ □□ □□ □□/□□

EU □□

REACH □□□ XVII (□□ □□)

EU restriction □□ (REACH Annex XVII)	
□□ □□	□□ □□
3(b)	TETRACHLOROETHYLENE FOR UV SPECTROSCOPY
3(c)	TETRACHLOROETHYLENE FOR UV SPECTROSCOPY

REACH □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□)□ □□□□ □□

REACH □□ □□ □□ (SVHC)

REACH □□ □□ □□□ □□□ □□□ □□□□ □□

PIC □□ (□□□□□□)

PIC □□□ □□□□ □□ (□□ EU 649/2012)

POP □□ (□□□ □□ □□□□)

POP □□□ □□□□ □□ (□□ EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

□□□□ □□(428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

□□ □□□□ □□ (2019/1148)

□□□ □□□□ □□(□□ □□□□□ □□ □ □□□ □□ □□ EU 2019/1148)□ □□□ □□ □□□□ □□

□□ □□□□ □□ (273/2004)

□□ □□□□ □□□ □□□ □□□ □□□□ □□(□□ □ □□□□ □□□ □□ □□□ □□□□ □□ □□□ □□ □ □□□ □□ □□ EC 273/2004)

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RG 12	
RG 84	

□□

VOC ordinance (ChemVOCFarbV) :

WGK : WGK 3, □□ □□ □□□ (Classification according to AwSV).

□□ □□ □□(12. BImSchV) : □□ □□ □□(12. BImSchV)□ □□ □□ □□

□□□□

SZW-lijst van kankerverwekkende stoffen : □□□ □□□□ □□□□□.

SZW-lijst van mutagene stoffen : □□□ □□□□ □□□□□.

SZW-lijst van reprotoxische stoffen – Borstvoeding : □□□ □□□□ □□□□□.

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : □□□ □□□□ □□□□□.

SZW-lijst van reprotoxische stoffen – Ontwikkeling : TETRACHLOROETHYLENE□(□) □□□ □□□□□

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□□□ □□ □□ : 18□ □□ □□□ □□ □□□ □□□□□
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15.2. □□ □□ □□□ □□

No chemical safety assessment has been carried out

□□ 16: □ □□ □□□□

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ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

□□ □ □□□□:	
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□
EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average

□□ □ □□□□□:	
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

□H□ □ EUH□ □□:	
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H315	□□□ □□□ □□□.
H351	□□ □□□ □□□ □□□.
H411	□□□□ □□□ □□ □□□□□□ □□□.

□□□□□□□□□(SDS), EU

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