

Revision nr. 5 Dated 09/08/2023

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

1.1. Product identifier

Mixture identification: Product Name: Code:

XTX 45 OIL BLEEDING PART B DT21146, DT21147, DT21148

1.2. Relevant identified uses of the substance or mixture and uses advised against For industrial/ professional use only. Addition silicone for mold making.

1.3. Details of the supplier of the safety data sheet

Name Zhermack S.p.a Via Bovazecchino 100 45021 Badia Polesine (RO) Italy tel. +39 0425-597611 fax +39 0425-597689 Competent person responsible for the safety data sheet:

msds@zhermack.com

1.4. Emergency telephone number

+39 0425 597611 (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%:

>= 0,5% - < 2,5% octamethylcyclotetrasiloxane; [D4] - Index number: 014-018-00-1, CAS: 556-67-2, EC: 209-136-7:

PBT, vPvB

>= 0,5% - < 2,5% Dodecamethylcyclohexasiloxane- D6 - REACH No.:

01-2119517435-42-0001, CAS: 540-97-6, EC: 208-762-8:

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PBT, vPvB

>= 0,5% - < 2,5% Decamethylcyclopentasiloxane - D5 - REACH No.: 01-2119511367-43-0002, CAS: 541-02-6, EC: 208-764-9: PBT, vPvB

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 0,5% - < 2,5%	octamethylcyclotetrasil oxane; [D4]	Index number: CAS: EC:	014-018-00-1 556-67-2 209-136-7	Flam. Liq. 3 H226 Flammable liquid and vapour. Repr. 2 H361f Suspected of damaging fertility. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=10.
>= 0,5% - < 2,5%	Decamethylcyclopenta siloxane - D5	CAS: EC: REACH No.:	541-02-6 208-764-9 01-21195113 67-43-0002	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
>= 0,5% - < 2,5%	Dodecamethylcyclohex asiloxane- D6	CAS: EC: REACH No.:	540-97-6 208-762-8 01-21195174 35-42-0001	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

SVHC, PBT, vPvB, endocrine disruptor substances:

>= 0,5% - < 2,5% octamethylcyclotetrasiloxane; [D4]

Index number: 014-018-00-1, CAS: 556-67-2, EC: 209-136-7 PBT, vPvB, SVHC

>= 0,5% - < 2,5% Decamethylcyclopentasiloxane - D5

REACH No.: 01-2119511367-43-0002, CAS: 541-02-6, EC: 208-764-9 PBT, vPvB, SVHC

>= 0,5% - < 2,5% Dodecamethylcyclohexasiloxane- D6

REACH No.: 01-2119517435-42-0001, CAS: 540-97-6, EC: 208-762-8 PBT, vPvB, SVHC

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed None

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

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Treatment: None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into

drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel: Wear personal protection equipment. Remove persons to safety. See protective measures under point 7 and 8. For emergency responders: Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

See section 10.5.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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XTX 45 OIL BLEEDING PART B octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

OEL Type	TWA	Duratio n	STEL	Duratio n	Notes	Country
No data available						

Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
No data available						

Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
No data available						

DNEL Exposure Limit Values Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6

Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
Consumer: 4.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local
effects
Worker Professional: 24.2 mg/m3 - Exposure: Human Inhalation - Frequency: Long
Term, local effects
Consumer: 5 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic
effects
Consumer: 17.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term,
systemic effects
Worker Professional: 97.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6
Consumer: 1.5 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer: 0.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 6.1 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Professional: 1.22 mg/m3 - Exposure: Human Inhalation - Frequency: Long
Term, local effects
Consumer: 1.7 mg/kg bw/d - Exposure: Human Oral - Frequency: Short Term, systemic effects
Consumer: 1.7 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 2.7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 11 mg/m3 - Exposure: Human Inhalation - Frequency: Long
Term, systemic effects
PNEC Exposure Limit Values
Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
Target: Fresh Water - Value: 0.0012 mg/l
Target: Marine water - Value: 0.00012 mg/l
Target: Freshwater sediments - Value: 11 mg/kg
Target: Marine water sediments - Value: 1.1 mg/kg
Target: Microorganisms in sewage treatments - Value: 10 mg/l Target: Food chain - Value: 16 mg/kg
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Target: Soil (agricultural) - Value: 1.27 mg/kg Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6 Target: Freshwater sediments - Value: 13 mg/kg Target: Marine water sediments - Value: 1.3 mg/kg Target: Microorganisms in sewage treatments - Value: 1 mg/l Target: Food chain - Value: 66.7 mg/kg Target: Soil (agricultural) - Value: 3.77 mg/kg 8.2. Exposure controls Precautionary measures: Give adequate ventilation to the premises where the product is stored and/or handled. Eye protection: Wear airtight protective goggles (EN 166). Protection for skin: Wear professional overalls and safety footwear (EN 14605). Protection for hands: Protect hands with work gloves (EN 374). The following should be considered when choosing work glove material (EN 374): compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use. Respiratory protection: Use respiratory protection where ventilation is insufficient or exposure is prolonged. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA). Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	Transparent		
Odour:	Odourless		
Melting point/freezing point:	Not available		
Boiling point or initial boiling point and boiling range:	Not available		
Flammability:	Not available		
Lower and upper explosion limit:	Not available		
Flash point:	Not available		
Auto-ignition temperature:	Not available		
Decomposition temperature:	Not available		
pH:	Not available		
Kinematic viscosity:	Not available		
Solubility in water:	Insoluble		

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Solubility in oil:	Not available	
Partition coefficient	Not available	
n-octanol/water (log value):		
Vapour pressure:	Not available	
Density and/or relative	Not available	
density:		
Relative vapour density:	Not available	
	Particle characteristics:	
Particle size:	Not available	

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

- 10.1. Reactivity Stable under normal conditions
- **10.2. Chemical stability** Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- 10.4. Conditions to avoid Stable under normal conditions.10.5. Incompatible materials
 - None in particular.
- **10.6. Hazardous decomposition products** None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the product:

XTX 45 OIL BLEEDING PART B

- a) acute toxicity
 - Not classified
- b) skin corrosion/irritation Not classified
- c) serious eye damage/irritation Not classified
- d) respiratory or skin sensitisation Not classified
- e) germ cell mutagenicity Not classified
- f) carcinogenicity Not classified
- g) reproductive toxicity Not classified

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h) STOT-single exposure Not classified

i) STOT-repeated exposure Not classified

j) aspiration hazard Not classified

Toxicological information of the main substances found in the product:

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

a) acute toxicity:

Test: LC50 - Species: Rat 36 mg/l - Source: (OECD 403, GLP, rat, 4 h, ECHA dossier). Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (similar to OECD 402, rat, ECHA dossier).

Test: LD50 - Route: Oral - Species: Rat 4800 mg/kg - Source: (similar to OECD 401, rat, ECHA dossier).

Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: (OECD 401, MSDS supplier).

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: (OECD 402, MSDS supplier).

Test: LC50 - Route: Inhalation - Species: Rat 8.67 mg/l - Duration: 4h - Source: (OECD 403, MSDS supplier).

Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rat 2000 mg/kg - Source: (ECHA dossier).

Test: LD50 - Route: Oral - Species: Rat 2000 mg/kg - Source: (ECHA dossier).

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

The product is not classified for chronic aquatic hazard: a test based on the bioavailability / release of D4 by the polymer silicone was performed with the OECD 29 method. It was found that the quantity of D4 released by 100mg of polymer is at least below the quantification limit of the method (i.e. 4.4 ppb), a value significantly lower than the limit that would result in the classification for chronic aquatic toxicity, i.e. NOEC of 0.0044 mg / L for fish and 0.0079 mg / L for aquatic invertebrates. Therefore, the product is not classified for this hazard class.

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

XTX 45 OIL BLEEDING PART B

The product is classified: -

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

a) Aquatic acute toxicity:

Endpoint: IC50 - Species: Algae > 0.0022 mg/l - Duration h: 72h (EPA OTS 797.1050, Selenastrum capricornutum, freshwater, ECHA dossier).

Endpoint: LC50 - Species: Fish > 0.0022 mg/l (Oncorhynchus mykiss, GLP, ECHA dossier).

Endpoint: NOEC - Species: Fish > 0.0044 mg/l (publication, Oncorhynchus mykiss, GLP, ECHA dossier).

Long-term toxicity to aquatic invertebrates:

Endpoint: NOEC - Species: Daphnia = $7.9 \ \mu g/L$ - Duration h: 21d EPA OTS 797.1330, Daphnia magna, ECHA dossier

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Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 0.0016 mg/l - Duration h: 96h (OECD 204,
Oncorhynchus mykiss (Trota iridea), SDS supplier).
Endpoint: EC50 - Species: Daphnia > 0.00029 mg/l - Duration h: 48h (OECD 202,
Daphnia magna, SDS supplier).
Endpoint: EC50 - Species: Algae > 0.0012 mg/l - Duration h: 72h (OECD 201,
Pseudokirchneriella subcapitata, SDS supplier).
Endpoint: NOEC - Species: Fish > 0.0014 mg/l (OECD 210, Oncorhynchus mykiss, SDS supplier).
Endpoint: NOEC - Species: Daphnia > 0.0015 mg/l (OECD 211, Daphnia magna, SDS
supplier).
Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Algae > 0.002 mg/l - Duration h: 72h (Pseudokirchnerella
subcapitata, ECHA dossier).
Endpoint: NOEC - Species: Algae > 0.002 mg/l (Pseudokirchnerella subcapitata, ECHA
dossier).
12.2. Persistence and degradability
Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
Biodegradability: Non-readily biodegradable
Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6
Biodegradability: Non-readily biodegradable
12.3. Bioaccumulative potential
octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2
Test: Kow - Partition coefficient 6.49 - Notes: (Log Pow, ECHA dossier).
12.4. Mobility in soil
Not available
12.5. Results of PBT and vPvB assessment
PBT Substances:
>= 0,5% - < 2,5% octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2
>= 0,5% - < 2,5% Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
>= 0,5% - < 2,5% Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6
vPvB Substances:
>= 0,5% - < 2,5% octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2
>= 0,5% - < 2,5% Decamethylcyclopentasiloxane - D5 - CAS: 541-02-6
>= 0,5% - < 2,5% Dodecamethylcyclohexasiloxane- D6 - CAS: 540-97-6
12.6. Endocrine disrupting properties
No endocrine disruptor substances present in concentration >= 0.1%
12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

- 14.2. UN proper shipping name
 - Not available
- 14.3. Transport hazard class(es)

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Not available	
14.4. Packing group	
Not available	
14.5. Environmental hazards	
ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
Not available	
14.7. Maritime transport in bulk acc	cording to IMO instruments
Not Applicable	-
CTION 15: Regulatory information	

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3 Restriction 40** Restrictions related to the substances contained: **Restriction 70 Restriction 75** SVHC Substances: Substances in candidate list (Art. 59 Reg. 1907/2006, REACH): octamethylcyclotetrasiloxane; [D4] PBT, vPvB Decamethylcyclopentasiloxane - D5 PBT, vPvB Dodecamethylcyclohexasiloxane- D6 PBT, vPvB Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 Product belongs to category: E2

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WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

Lagerklasse according to TRGS 510: LGK 10: Combustible liquids

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None.

California Proposition 65

Substance(s) listed under California Proposition 65: None.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out: None

SECTION 16: Other information

Full text of phrases referred to in Section 3: H226 Flammable liquid and vapour.

H361f Suspected of damaging fertility.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Repr. 2	3.7/2	Reproductive toxicity, Category 2
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic	According to Article 12 of the CLP Regulation, "Where, as a result of the evaluation carried out pursuant to Article 9, the following properties or effects are identified, manufacturers, importers and downstream users shall take them into account for the purposes of classification: [] (b) conclusive scientific experimental data show that the substance or mixture is not biologically available and those data have been ascertained to be adequate and reliable." Following a release study of D4 through the OECD 29 test on polymeric products representative for quantity of D4, the limit that would result in the classification for chronic aquatic toxicity (NOEC of 0.0044 mg / L for fish and 0.0079 mg / L for invertebrates aquatic) is not reached.

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This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECHA – European Chemical Agency GESTIS - Information system on hazardous substances of the German Social Accident Insurance IARC – International Agency for Research on Cancer IPCS INCHEM – International Programme on Chemical Safety ISS – Istituto Superiore di Sanità PubChem - open chemistry database at the National Institutes of Health (NIH)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS: GefStoffVO:	European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.