Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

HIMIX DEGREASER STRONG [FPF0000018]

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

1.1. Product identifier

Product identifier: **Mixtures**

Trade name/designation: **HIMIX DEGREASER STRONG FPF0000018**

Hazard components for labelling

Substance name	Index No.	EC No.	CAS No.
SODIUM METASILICATE PENTAHYDRATE		229-912-9 ;	10213-79-3
u03b2-ALANINE, N-(2-CARBOXYETHYL)-, N-COCO ALKYL DERIVS., DISODIUM SALTS		290-476-8	90170-43-7
COCAMINOPROPIONIC ACID		284-219-9	84812-94-2
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH DIETHYLENETRIAMINE		263-160-2	61790-69-0
1,2-benzothiazol-3-one	613-088-00-6	220-120-9	2634-33-5

Other means of identification

Unique Formula Identifier: **CH10-F03N-D00J-YGRR**

Product category: **[P] Products**

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

Relevant identified uses

Use of the substance/mixture: **PC-CLN Cleaning, care and maintenance products (excludes biocidal products) | PC-CLN-10.1 Cleaners for kitchen areas | PC-CLN-10.4 Oven, grill or barbecue cleaners | PC-CLN-2 All-purpose (or multi-purpose) non-abrasive cleaners including degreasing agents (unless otherwise specified in other subcategories of cleaning products) | PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)**

Uses advised against

Uses advised against: **The uses are provided in Section 1.2. Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.**

Remark

1.3. Details of the supplier of the safety data sheet

Manufacturer

Rubino Chem Srl
Via Vigili del Fuoco Caduti in Servizio, 14/s
70026 Bari - Italia
+39 080 5035348
customerservice@rubinochem.it | www.rubinochem.it

Information contact

Department responsible for information: **Affari Regolatori**
Alba Rosa Russo | +39 080 5035348 | customerservice@rubinochem.it

1.4. Emergency Telephone Number

Emergency Telephone Number: **080 5035348** (Only available during office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard classes and hazard categories

Physical Hazards

Not hazardous according to classification

Health Hazards

Eye Dam. 1 | H318

Environmental hazards

Not hazardous according to classification

Additional hazards

Not hazardous according to classification

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms: **GHS05**

Signal word: **[DGR] Danger**

DANGER

Hazard Statements

Hazard statements for health hazards

[H318] Causes serious eye damage.

Classification procedure: Calculation method.

Precautionary Statements

General

[P103] Read carefully and follow all instructions.

Prevention

[P280] Wear protective gloves/protective clothing and eye/face protection.

Response

[P305+P351+P338] IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

[P310] Immediately call a POISON CENTER.

Special rules for supplemental label elements for certain mixtures

[EUH208] Contains SODIUM METASILICATE PENTAHYDRATE | u03b2-ALANINE, N-(2-CARBOXYETHYL)-, N-COCO ALKYL DERIVS., DISODIUM SALTS | COCAMINOPROPIONIC ACID | FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH DIETHYLENETRIAMINE | 1,2-benzothiazol-3-one. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

	Concentration % [weight]	Substance name	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL), M-factor, Acute toxicity estimate (ATE)
CAS No.: **10213-79-3** EC No.: **229-912-9** Index No.: **014-010-00-8** REACH No.: **1-2119449811-37**	**1 < c <= 5**	SILANEDIOLATE, 1-OXO-, SODIUM SALT, HYDRATE (1:2:5)	**Skin Irrit. 2, Eye Dam. 1, Met. Corr. 1, STOT SE 3** [H290] May be corrosive to metals. [H335] May cause respiratory irritation. [H314] Causes severe skin burns and eye damage. [H318] Causes serious eye damage.	
CAS No.: **90170-43-7** EC No.: **290-476-8** Index No.: REACH No.:	**1 < c <= 5**	β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts	**Eye Irrit. 2** [H319] Causes serious eye irritation.	
CAS No.: **84812-94-2** EC No.: **284-219-9** Index No.: REACH No.:	**0.1 <= c <= 1**	β-Alanine, N-coco alkyl derivs	**Eye Dam. 1, Aquatic Acute 1** [H318] Causes serious eye damage. [H400] Very toxic to aquatic life.	
CAS No.: **61790-69-0** EC No.: **263-160-2** Index No.: REACH No.:	**0.1 <= c <= 1**	FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH DIETHYLENETRIAMINE	**Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1** [H314] Causes severe skin burns and eye damage. [H318] Causes serious eye damage. [H400] Very toxic to aquatic life.	

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove victim out of the danger area. Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation

In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

Following skin contact

After contact with skin, wash immediately with plenty of water and soap.

Following eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion

Do NOT induce vomiting.

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

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO_2). Dry extinguishing powder. Foam. Water mist

Unsuitable extinguishing media

Strong water jet

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Wear full chemical protective clothing.

5.4. Additional information

Move undamaged containers from immediate hazard area if it can be done safely. Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal precautions: Use personal protection equipment.

Emergency procedures: Remove persons to safety.

For emergency responders

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Ensure waste is collected and contained. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

For containment

Suitable material for taking up: Sand Absorbing material, organic

For cleaning up

Suitable material for diluting or neutralising: Water

6.4. Reference to other sections

Safe handling: see section 7. Disposal: see section 13. Personal protection equipment: see section 8.

6.5. Additional information

No information available.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Protective measures

Advice on safe handling

Wear personal protective clothing (see section 8). Always close containers tightly after the removal of product. Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Always close containers tightly after the removal of product.

Avoid: Skin contact. Eye contact. Inhalation of vapours or spray/mists

Measures to prevent fire

Measures to prevent aerosol and dust generation

Environmental precautions

Specific requirements or handling rules

Further information

Advices on general occupational hygiene

Wash contaminated clothing prior to re-use.. Wash hands and face before breaks and after work and take a shower if necessary.. Used working clothes should not be worn outside the working area.. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Advice on joint storage

Further information on storage conditions

General information

No information available.

Storage temperature

7.3. Specific end uses

Recommendation

Industrial sector specific solutions

Refer to the industry guidance prepared by Concawe/Cefic/EFCG for advice on the confirmation of strictly controlled conditions available from: https://cefic.org

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OELV (Occupational exposure limit values)
sodium hydroxide (CAS: 1310-73-2) (EC: 215-185-5)

Limit value type (country of origin)	Long-term occupational exposure limit value	Short-term occupational exposure limit value	Source
Australia		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Austria	2 inhalable aerosol mg/m³	4 inhalable aerosol mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
Belgium	2 (1) mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Additional indication "M" means that irritation occurs when the exposure exceeds the limit value or there is a risk of acute poisoning. The work process must be designed in such a way that the exposure never exceeds the limit value. For evaluation, the sampled period should be as short as possible. However, the sampled period shall be long enough to perform a reliable measurement. The measured result shall be related to the considered period.			
Canada - Ontario		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Canada - Québec		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Denmark	2 mg/m³	2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			

Limit value type (country of origin)	Long-term occupational exposure limit value	Short-term occupational exposure limit value	Source
Finland		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
France	2 mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
Hungary	1 mg/m³	2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) 15 minutes average value			
Ireland		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) 15 minutes reference period			
Japan (JSOH)	2 (1) mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Occupational exposure limit ceiling: Reference value to the maximal exposure concentration of the substance during a working day			
Latvia	0,5 mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
New Zealand		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Norway		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
People's Republic of China		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Poland	0,5 mg/m³	1 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) 15 minutes average value			
Romania	1 mg/m³	3 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) 15 minutes average value			
Singapore		2 mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
South Africa		4 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
South Africa Mining		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
South Korea		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value			
Spain	2 mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
Sweden	1 (1) mg/m³	2 (1)(2) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Inhalable fraction (2) 15 minutes average value			
Switzerland	2 inhalable aerosol mg/m³	2 inhalable aerosol mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
USA - NIOSH		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) Ceiling limit value (15 min)			
USA - OSHA	2 mg/m³		GESTIS International Limit Values (limitvalue.ifa.dguv.de)
United Kingdom		2 (1) mg/m³	GESTIS International Limit Values (limitvalue.ifa.dguv.de)
(1) 15 minutes average value			

BLV (Biological limit values)

No information available.

DNEL-/PNEC-values

DNEL (Derived No Effect Level) | Worker
SILANEDIOLATE, 1-OXO-, SODIUM SALT, HYDRATE (1:2:5) (CAS: 10213-79-3) (EC: 229-912-9)

Type	Value	Source	Remark
Acute – dermal, local effects		ECHA/IUCLID	
Acute – dermal, systemic effects		ECHA/IUCLID	
Long-term – dermal, local effects		ECHA/IUCLID	
Long-term – dermal, systemic effects	1.49 mg/kg bw/day	ECHA/IUCLID	
Acute – inhalation, local effects		ECHA/IUCLID	
Acute – inhalation, systemic effects		ECHA/IUCLID	
Long-term – inhalation, local effects		ECHA/IUCLID	
Long-term – inhalation, systemic effects	6.22 mg/m^3	ECHA/IUCLID	

PNEC (Predicted No-Effect Concentration)
SILANEDIOLATE, 1-OXO-, SODIUM SALT, HYDRATE (1:2:5) (CAS: 10213-79-3) (EC: 229-912-9)

PNEC type	Value	Source	Remark
aquatic, freshwater	7.5 mg/L	ECHA/IUCLID	
aquatic, marine water	1 mg/L	ECHA/IUCLID	
aquatic, intermittent release	7.5 mg/L	ECHA/IUCLID	
sediment, freshwater		ECHA/IUCLID	
sediment, marine water		ECHA/IUCLID	
soil		ECHA/IUCLID	
sewage treatment plant	1000 mg/L	ECHA/IUCLID	
air		ECHA/IUCLID	
secondary poisoning		ECHA/IUCLID	

DNEL (Derived No Effect Level) | Worker
β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts (CAS: 90170-43-7) (EC: 290-476-8)

Type	Value	Source	Remark
Acute – dermal, local effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Acute – dermal, systemic effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – dermal, local effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – dermal, systemic effects	2.67 mg/kg bw/day	ECHA/IUCLID	Extrapolation.
Acute – inhalation, local effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Acute – inhalation, systemic effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, local effects	Low hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, systemic effects	980 mg/m^3	ECHA/IUCLID	Extrapolation.

PNEC (Predicted No-Effect Concentration)
β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts (CAS: 90170-43-7) (EC: 290-476-8)

PNEC type	Value	Source	Remark
aquatic, freshwater	100 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, marine water	10 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, intermittent release	100 µg/L	ECHA/IUCLID	Extrapolation.

PNEC type	Value	Source	Remark
sediment, freshwater	-	ECHA/IUCLID	Extrapolation.
sediment, marine water	-	ECHA/IUCLID	Extrapolation.
soil	-	ECHA/IUCLID	Extrapolation.
sewage treatment plant	300 µg/L	ECHA/IUCLID	Extrapolation.
air	No hazard identified	ECHA/IUCLID	Extrapolation.
secondary poisoning	-	ECHA/IUCLID	Extrapolation.

DNEL (Derived No Effect Level) | Worker
DIPHOSPHORIC ACID POTASSIUM SALT (1:4) (CAS: 7320-34-5) (EC: 230-785-7)

No information available.

PNEC (Predicted No-Effect Concentration)
DIPHOSPHORIC ACID POTASSIUM SALT (1:4) (CAS: 7320-34-5) (EC: 230-785-7)

No information available.

DNEL (Derived No Effect Level) | Worker
β-Alanine, N-coco alkyl derivs (CAS: 84812-94-2) (EC: 284-219-9)

Type	Value	Source	Remark
Acute – dermal, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Acute – dermal, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – dermal, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – dermal, systemic effects	4 mg/kg bw/day	ECHA/IUCLID	Extrapolation.
Acute – inhalation, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Acute – inhalation, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, systemic effects	9.9 mg/m³	ECHA/IUCLID	Extrapolation.

PNEC (Predicted No-Effect Concentration)
β-Alanine, N-coco alkyl derivs (CAS: 84812-94-2) (EC: 284-219-9)

PNEC type	Value	Source	Remark
aquatic, freshwater	1.2 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, marine water	800 ng/L	ECHA/IUCLID	Extrapolation.
aquatic, intermittent release	12 µg/L	ECHA/IUCLID	Extrapolation.
sediment, freshwater	100 µg/kg sediment dw	ECHA/IUCLID	Extrapolation.
sediment, marine water	10 µg/kg sediment dw	ECHA/IUCLID	Extrapolation.
soil	8.22 µg/kg soil dw	ECHA/IUCLID	Extrapolation.
sewage treatment plant	3.2 mg/L	ECHA/IUCLID	Extrapolation.
air	No hazard identified	ECHA/IUCLID	Extrapolation.
secondary poisoning		ECHA/IUCLID	Extrapolation.

DNEL (Derived No Effect Level) | Worker
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH DIETHYLENETRIAMINE (CAS: 61790-69-0) (EC: 263-160-2)

No information available.

PNEC (Predicted No-Effect Concentration)
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH DIETHYLENETRIAMINE (CAS: 61790-69-0) (EC: 263-160-2)

PNEC type	Value	Source	Remark

aquatic, freshwater	10 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, marine water	1 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, intermittent release	100 µg/L	ECHA/IUCLID	Extrapolation.
sediment, freshwater	900000 mg/kg sediment dw	ECHA/IUCLID	Extrapolation.
sediment, marine water	90000 mg/kg sediment dw	ECHA/IUCLID	Extrapolation.
soil	1080	ECHA/IUCLID	Extrapolation.
sewage treatment plant	100 mg/L	ECHA/IUCLID	Extrapolation.
air	No hazard identified	ECHA/IUCLID	Extrapolation.
secondary poisoning	()	ECHA/IUCLID	Extrapolation.

DNEL (Derived No Effect Level) | Worker
sodium hydroxide (CAS: 1310-73-2) (EC: 215-185-5)

Type	Value	Source	Remark
Acute – dermal, local effects	High hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Acute – dermal, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – dermal, local effects	High hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – dermal, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Acute – inhalation, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Acute – inhalation, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, local effects	1 mg/m^3	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.

PNEC (Predicted No-Effect Concentration)
sodium hydroxide (CAS: 1310-73-2) (EC: 215-185-5)

PNEC type	Value	Source	Remark
aquatic, freshwater	:	ECHA/IUCLID	Extrapolation.
aquatic, marine water	:	ECHA/IUCLID	Extrapolation.
aquatic, intermittent release	:	ECHA/IUCLID	Extrapolation.
sediment, freshwater	:	ECHA/IUCLID	Extrapolation.
sediment, marine water	:	ECHA/IUCLID	Extrapolation.
soil	:	ECHA/IUCLID	Extrapolation.
sewage treatment plant	:	ECHA/IUCLID	Extrapolation.
air	No hazard identified	ECHA/IUCLID	Extrapolation.
secondary poisoning		ECHA/IUCLID	Extrapolation.

DNEL (Derived No Effect Level) | Worker
potassium hydroxide (CAS: 1310-58-3) (EC: 215-181-3)

No information available.

PNEC (Predicted No-Effect Concentration)
potassium hydroxide (CAS: 1310-58-3) (EC: 215-181-3)

No information available.

DNEL (Derived No Effect Level) | Worker
ETHYLENEGLYCOL (CAS: 107-21-1) (EC: 203-473-3)

No information available.

PNEC (Predicted No-Effect Concentration)
ETHYLENEGLYCOL (CAS: 107-21-1) (EC: 203-473-3)

No information available.

DNEL (Derived No Effect Level) | Worker
1,2-benzothiazol-3-one (CAS: 2634-33-5) (EC: 220-120-9)

Type	Value	Source	Remark
Acute – dermal, local effects	High hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Acute – dermal, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – dermal, local effects	High hazard (no threshold derived)	ECHA/IUCLID	Extrapolation.
Long-term – dermal, systemic effects	966 µg/kg bw/day	ECHA/IUCLID	Extrapolation.
Acute – inhalation, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Acute – inhalation, systemic effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, local effects	No hazard identified	ECHA/IUCLID	Extrapolation.
Long-term – inhalation, systemic effects	6.81 mg/m^3	ECHA/IUCLID	Extrapolation.

PNEC (Predicted No-Effect Concentration)
1,2-benzothiazol-3-one (CAS: 2634-33-5) (EC: 220-120-9)

PNEC type	Value	Source	Remark
aquatic, freshwater	4.03 µg/L	ECHA/IUCLID	Extrapolation.
aquatic, marine water	403 ng/L	ECHA/IUCLID	Extrapolation.
aquatic, intermittent release	1.1 µg/L	ECHA/IUCLID	Extrapolation.
sediment, freshwater	49.9 µg/kg sediment dw	ECHA/IUCLID	Extrapolation.
sediment, marine water	4.99 µg/kg sediment dw	ECHA/IUCLID	Extrapolation.
soil	3 mg/kg soil dw	ECHA/IUCLID	Extrapolation.
sewage treatment plant	1.03 mg/L	ECHA/IUCLID	Extrapolation.
air	No hazard identified	ECHA/IUCLID	Extrapolation.
secondary poisoning		ECHA/IUCLID	Extrapolation.

8.2. Exposure controls

Appropriate engineering controls

No information available.

Personal protection equipment

Eye/face protection

No information available.

Recommended eye protection articles

No information available.

Other eye protection

No information available.

Remark

No information available.

Skin protection

Hand protection | By short-term hand contact

No information available.

Hand protection | By long-term hand contact

No information available.

Recommended glove articles

No information available.

Additional hand protection measures

No information available.

Remark

No information available.

Body protection

No information available.

Recommended protective clothing articles

No information available.

Additional body protection measures

No information available.

Remark

No information available.

Other skin protection

No information available.

Respiratory protection

No information available.

Recommended respiratory protection articles

No information available.

Additional measures for respiratory protection

No information available.

Remark

No information available.

Thermal hazards

No information available.

Remark

No information available.

Environmental exposure controls

No information available.

Remark

No information available.

Consumer exposure controls

No information available.

8.3. Additional information

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

	Value	Method	Source	Remark
Physical state	liquid melt			
Colour	amber			
Odour	characteristic			
Odour threshold	ND			
Melting point/freezing point	ND			
Boiling point or initial boiling point and boiling range	- °C			not applicable
Flammability	ND			
Lower and upper explosion limit	ND			
Flash point	- °C			not applicable

	Value	Method	Source	Remark
Auto-ignition temperature	ND			
Decomposition temperature	ND			
pH	in delivery state 13 | Concentration 100			
Viscosity	ND			
Solubility	ND			
Partition coefficient n-octanol/water (log value)	ND			
Vapour pressure	ND			
Density/Relative density	ND			
Relative vapour density	ND			
Particle characteristics	ND			

9.2. Other information

Information with regard to physical hazard classes

No information available.

Other physical and chemical properties

No information available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No further relevant information available.

No information available.

10.5. Incompatible materials

No further relevant information available.

10.6. Hazardous decomposition products

No information available.

10.7. Additional information

No information available.

SECTION 11: Toxicological information

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

Toxicokinetics, metabolism and distribution

Non-human toxikological data

No information available.

Human toxicological data

No information available.

Acute toxicity

Practical experience/human evidence

No information available.

Animal data

SILANEDIOLATE, 1-OXO-, SODIUM SALT, HYDRATE (1:2:5) (CAS: 10213-79-3) (EC: 229-912-9)

	Effect dose / -concentration	Value	Species	Method	Symptoms/ delayed effects	Source	Remark
Acute oral toxicity oral	**LD50**	**1152-1349 mg/kg bw**	Mouse ()				
Acute dermal toxicity dermal	**LD50**	**>5000 mg/kg**	Rat ()				
Acute inhalation toxicity (dust/mist) dust_mist	**LC50**	**> 2.06 mg/L | Exposure time: 4h**	Rat ()				

DIPHOSPHORIC ACID POTASSIUM SALT (1:4) (CAS: 7320-34-5) (EC: 230-785-7)

	Effect dose / -concentration	Value	Species	Method	Symptoms/ delayed effects	Source	Remark
Acute oral toxicity oral	**LD50**	**>2000 mg/kg**	Rat (male)				
Acute dermal toxicity dermal	**LD50**	**> 2000 mg/kg**	Rabbit ()	OECD 402			
Acute inhalation toxicity (dust/mist) dust_mist	**LC50**	**>1.1 mg/L | Exposure time: 4h**	Rat ()	OECD 403			

β-Alanine, N-coco alkyl derivs (CAS: 84812-94-2) (EC: 284-219-9)

	Effect dose / -concentration	Value	Species	Method	Symptoms/ delayed effects	Source	Remark
Acute oral toxicity oral	**LD50**	**5000 mg/kg**	Rat ()				

1,2-benzothiazol-3-one (CAS: 2634-33-5) (EC: 220-120-9)

	Effect dose / -concentration	Value	Species	Method	Symptoms/ delayed effects	Source	Remark
Acute oral toxicity oral	**LD50**	**490 mg/kg bw**	Rat (male)				
Acute dermal toxicity dermal	**LD50**	**2000 mg/kg bw**	Rat ()				

No information available.

Other information

No information available.

Assessment / classification

No information available.

Skin corrosion/irritation

Practical experience/human evidence

No information available.

Acid/alkaline reserve

No information available.

Animal data

No information available.

Other information

No information available.

Assessment / classification

No information available.

Serious eye damage/irritation

Practical experience/human evidence

No information available.

Animal data

No information available.

Other information

No information available.

Assessment / classification

No information available.

Respiratory or skin sensitisation

Sensitisation to the respiratory tract

Practical experience/human evidence

No information available.

Other information

No information available.

Assessment / classification

No information available.

Skin sensitisation

Practical experience/human evidence

No information available.

Animal data

No information available.

Other information

No information available.

Assessment / classification

No information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

In vitro mutagenicity/genotoxicity

No information available.

In vivo mutagenicity/genotoxicity

No information available.

Other information

No information available.

Human toxicological data

No information available.

Assessment / classification

No information available.

Carcinogenicity

Practical experience/human evidence

No information available.

Animal data

No information available.

Other information

No information available.

Assessment / classification

No information available.

Reproductive toxicity

Practical experience/human evidence

No information available.

Animal data

Adverse effects on sexual function and fertility

No information available.

Adverse effects on developmental toxicity

No information available.

Effects on or via lactation

No information available.

Other information

No information available.

Assessment / classification

No information available.

Overall assessment on CMR properties

No information available.

STOT - Single exposure

STOT SE 1 and 2

Practical experience/human evidence

No information available.

Animal data

Oral specific target organ toxicity (single exposure)

No information available.

Dermal specific target organ toxicity (single exposure)

No information available.

Inhalative specific target organ toxicity (single exposure)

No information available.

Other information

No information available.

Assessment / classification

No information available.

STOT SE 3

Irritation to respiratory tract

Practical experience/human evidence

No information available.

Other information

No information available.

Assessment / classification

No information available.

Narcotic effects

Practical experience/human evidence

No information available.

Other information

No information available.

Assessment / classification

No information available.

STOT - Repeated exposure

Practical experience/human evidence

No information available.

Animal data

Oral specific target organ toxicity (repeated exposure)

No information available.

Dermal specific target organ toxicity (repeated exposure)

No information available.

Inhalative specific target organ toxicity (single exposure)

No information available.

Other information

No information available.

Assessment / classification

No information available.

Aspiration hazard

Practical experience/human evidence

No information available.

Experimental data

No information available.

Assessment / classification

No information available.

Symptoms related to the physical, chemical and toxicological characteristics

In case of ingestion

No information available.

In case of skin contact

No information available.

In case of inhalation

No information available.

In case of eye contact

No information available.

Additional information

No information available.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity

SILANEDIOLATE, 1-OXO-, SODIUM SALT, HYDRATE (1:2:5) (CAS: 10213-79-3) (EC: 229-912-9)

	Effect dose / -concentration	Value	Test duration	Species	Result / evaluation	Method	Evaluation parameter	Source	Remark
Acute (short-term) fish toxicity	**LC50**	210 mg/L	96 h	Danio rerio (zebra-fish)					
Acute (short-term) toxicity to aquatic invertebrates	**EC50**	1700 mg/L	48 h	Daphnia magna (Big water flea)					
Acute (short-term) toxicity to algae and cyanobacteria	**EC50**	207 mg/L	72 h	Desmodesmus subspicatus					

β-Alanine, N-(2-carboxyethyl)-, N-coco alkyl derivs., disodium salts (CAS: 90170-43-7) (EC: 290-476-8)

	Effect dose / - concentration	Value	Test duration	Species	Result / evaluation	Method	Evaluation parameter	Source	Remark
Acute (short-term) fish toxicity	**LC50**	4.2 mg/L	48 h					ECHA Brief Profile	
Chronic (long-term) fish toxicity	**NOEC**	3.2 mg/L	4 d					ECHA Brief Profile	
Acute (short-term) toxicity to aquatic invertebrates	**EC50**	29 mg/L	48 h					ECHA Brief Profile	
Acute (short-term) toxicity to aquatic invertebrates	**EC50**	55 mg/L	24 h					ECHA Brief Profile	
Chronic (long-term) toxicity to aquatic invertebrates	**NOEC**	3 mg/L	2 d					ECHA Brief Profile	
Chronic (long-term) toxicity to aquatic invertebrates	**NOEC**	7.5 mg/L	1 d					ECHA Brief Profile	
Chronic (long-term) toxicity to aquatic invertebrates	**NOEC**	10 mg/L	21 d					ECHA Brief Profile	
Acute (short-term) toxicity to algae and cyanobacteria	**EC50**	9.4 mg/L	72 h					ECHA Brief Profile	
Chronic (long-term) toxicity to algae and cyanobacteria	**NOEC**	5.5 mg/L	72 h					ECHA Brief Profile	
Toxicity to microorganisms	**EC50**	300 mg/L	3 h					ECHA Brief Profile	
Toxicity to microorganisms	**EC10**	30 mg/L	3 h					ECHA Brief Profile	

DIPHOSPHORIC ACID POTASSIUM SALT (1:4) (CAS: 7320-34-5) (EC: 230-785-7)

	Effect dose / - concentration	Value	Test duration	Species	Result / evaluation	Method	Evaluation parameter	Source	Remark
Acute (short-term) fish toxicity	**LC50**	>100 mg/L	96 h	Oncorhynchus mykiss (rainbow trout)					
Acute (short-term) toxicity to aquatic invertebrates	**EC50**	>100 mg/L	48 h	Daphnia magna (Big water flea)					
Acute (short-term) toxicity to algae and cyanobacteria	**EC50**	>100 mg/L	72 h	Desmodesmus subspicatus					

No information available.

Sediment toxicity

No information available.

Terrestrial toxicity

No information available.

Assessment / classification

No information available.

12.2. Persistence and degradability

Biodegradation

No information available.

Abiotic degradation

No information available.

Assessment / classification

No information available.

12.3. Bioaccumulative potential

Bioconcentration factor (BCF)

No information available.

Assessment / classification

No information available.

12.4. Mobility in soil

No information available.

Assessment / classification

No information available.

12.5. Results of PBT and vPvB assessment

Assessment / classification

No information available.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

12.8. Additional ecotoxicological information

No information available.

12.9. General information

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

No information available.

Waste codes / waste designations according to EWC / AVV

No information available.

After intended use

No information available.

Waste codes / waste designations according to EWC / AVV

No information available.

Remark

No information available.

Other disposal recommendations

No information available.

Additional information

No information available.

SECTION 14: Transport information

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI/IATA-DGR)
14.1. UN number	not subject to transport regulations	not subject to transport regulations	not subject to transport regulations	not subject to transport regulations
14.2. UN proper shipping name	not assigned	not assigned	not assigned	not assigned
14.3. Transport hazard class(es)	not assigned	not assigned	not assigned	not assigned
14.4. Packing group	not assigned	not assigned	not assigned	not assigned

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI/IATA-DGR)
14.5. Environmental hazards	Non-environmentally hazardous according to the dangerous goods regulations	Non-environmentally hazardous according to the dangerous goods regulations	Non-environmentally hazardous according to the dangerous goods regulations	Non-environmentally hazardous according to the dangerous goods regulations

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

No information available.

14.8. Additional information

All transport carriers

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)

No information available.

Inland waterway transport (ADN)

No information available.

Sea transport (IMDG)

No information available.

Air transport (ICAO-TI/IATA-DGR)

No information available.

SECTION 15: Regulatory information

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

Restrictions on use

No information available.

Restrictions of occupation

No information available.

Other regulations (EU)

No information available.

15.2. Chemical Safety Assessment

No information available.

15.3. Additional information

No information available.

SECTION 16: Other information

16.1. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Eye Dam. 1 | H318

H318	Causes serious eye damage.

16.2. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

No information available.

16.3. Training advice

No information available.

16.4. Key literature references and sources for data

No information available.

16.5. Abbreviations and acronyms

(Q)SAR	Qualitative structure activity relationship, mathematical method to predict e.g. biological activity based on chemical structure
ABS	Absorption
AC	Article category
ACGIH	American Conference of Governmental Industrial Hygienists. An organization of professionals in governmental agencies or educational institutions engaged in occupational safety and health programs. ACGIH develops and publishes recommended occupational exposure limits for chemical substances and physical agents.
ACID	Any chemical which undergoes dissociation in water with the formation of hydrogen ions. Acids have a sour taste and may cause severe burns. They turn litmus paper red and have ph values of 0 to 6. Acids will neutralize bases or alkaline media. Acids will react with a base to form a salt.
ADME	Absorption, distribution, metabolism, and excretion
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADNR	Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADR/RID/ADN	European Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
AF	Assessment factor
ANSI	American National Standards Institute. A privately funded organization that identifies industrial/public national consensus standards and coordinates their development.
API	American Petroleum Institute is an organization of the petroleum industry.
AQTX	Aquatic Toxicity. Adverse effects on marine life that result from their being exposed to a toxic substance.
AS	Allometric scaling
ASTM	American Society for Testing and Materials.
ATE	Acute Toxicity Estimate
AUC	Area under the curve; area under the blood/plasma concentration curve vs. time curve, representing the total amount of substance reaching the blood/plasma
BAL	British Anti-Lewisite. A name for the drug dimecaprol--a treatment for toxic inhalations.
BCF	Bio concentration factor
BCM	Blood-clotting mechanism effects.
BEI	Biological Exposure Indexes. Numerical values based on procedures to determine the amount of a material absorbed into the human body by measuring it or its metabolic products in tissue, fluid or exhaled air.
BMD	Benchmark dose; The BMD concept involves fitting a mathematical model to dose-response data. The BMD is defined as the dose causing a predetermined change in response
BMD10	The benchmark-dose associated with a 10% response (for tumours upon lifetime exposure after correction for spontaneous incidence, for other effects in a specified study)
BMDL10	The lower 95% confidence interval of a benchmark-dose representing a 10% response (e.g., tumour response upon lifetime exposure), i.e. the lower 95% confidence interval of a BMD10
BMF	Bio magnification factor
BP	Boiling Point. Temperature at which a liquid changes to a vapor state at a given pressure. Flammable materials with low boiling points generally present special fire hazards.
BREF	Best available technique reference document
BSAF	Biological soil accumulation factor
BTU	British Thermal Unit. Quantity of heat required to raise the temperature of 1 pound of water 1 degree F at 39.2F, its temperature of maximum density.
Bw	Body weight
C	Centigrade, a unit of temperature.
CAD	Chemical Agents Directive
CAS	Chemical Abstracts Service Number. An assigned number used to identify a chemical. CAS stands for Chemical Abstracts Service, an organization that indexes information published in Chemical Abstracts by the American Chemical Society and that provides index guides by which information about particular substances may be located in the abstracts. Sequentially assigned CAS numbers identify specific chemicals, except when followed by an asterisk(*) which signifies a compound (often naturally occurring) of variable composition. the numbers have no chemical significance. The CAS number is a concise, unique means of material identification.
CBI	Confidential business information

CC	Closed cup. Identifies one of the methods used to measure flash points of flammable liquids.
cc (cm3)	Cubic centimeter.
CEN	Comité Européen de Normalisation (European Committee for Standardization)
CFC	Chlorofluorocarbon. Associated with damage to the Earth's ozone layer.
CFR	Code of Federal Regulations. A collection of the regulations established by law.
cgs	Metric units of measure based upon centimeter, gram, and second.
CGS	Control guidance sheets
CHEMTREC	24-hour toll free telephone number (800-424-9300), intended primarily for use by those who respond to chemical transportation emergencies. Established by the Chemical Manufacturer's Association.
CHP	Chemical Hygiene Plan. Per 29 CFR 1910.1450, OSHA standard; "Occupational Exposures to Hazardous Chemicals in Laboratories." Effective 5/1/90. A written plan that includes specific work practices, standard operating procedures, equipment, engineering controls, and policies to ensure that employees are protected from hazardous exposure levels to all potentially hazardous chemicals in use in their work areas. The OSHA standard provides for training, employee access to information, medical consultations, examinations, hazard identification procedures, respirator use, and record keeping practices.
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
Cmax	Peak plasma concentration
CN Code	Combined Nomenclature
CNS	Central Nervous System, the brain and spinal cord.
CSA	Chemical safety assessment
CSR	Chemical safety report
cu ft (ft3)	Cubic foot. Cu ft is more usual.
cu m (m3)	Cubic meter. m3 is preferred.
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived minimum effect level
DNEL	Derived No-Effect Level
DPD	Directive 1999/45/EC (Dangerous Preparations Directive, DPD).
DSC	Differential Scanning Calorimetry
DSD	Directive 67/548/EEC (Dangerous Substances Directive, DSD)
DU	Downstream user
DU-CSA	Downstream user chemical safety assessment
DU-TGD	Downstream user technical guidance document
EASE	Estimation and assessment of substance exposure
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EC50	Effective Concentration. Concentration of a material in water, a single dose which is expected to cause a biological effect on 50% of a group of test animals.
ECHA	European Chemicals Agency
ED10	Effective dose 10 %; a dose representing an in-creased incidence of 10% due to a specific exposure (e.g. to a chemical).
EFSA	European Food Safety Authority
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ELR	Excess lifetime risk; additional lifetime risk over the background normal risk (or incidence of disease)
EmS	Emergency Schedule
EPIWIN	Estimation Program Interface for Windows
EPL	Exposure predictor band liquid

EPS	Exposure predictor band solid
ERC	Environmental release class
ES	Exposure scenario
ESD	Emission scenario document
EUSES	European System for the Evaluation of Substances
EWL	European waste list
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act requires that certain useful poisons, such as chemical pesticides, sold to the public contain labels that carry health hazard warnings to protect users. It is administered by EPA.
FOG	Visible suspension of fine droplets in a gas.
g	Gram. Metric unit of weight.
GDMF	General decision making framework
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
GLP	Good Laboratory Practice
HBMD10	Human BMD10
HevE	Human exposure via environment
HH	Human health
HS	Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation)
HSE	Health safety environment
HT25	Human T25
HtLF	High to low dose risk extrapolation factor
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IC	Industry category
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IDLH	Immediately Dangerous to Life and Health. Maximum concentration from which one could escape within 30 minutes without any escape-impairing symptoms or any irreversible health effects.
IMDG	International Maritime Dangerous Goods
IMDG-Code	International Maritime Dangerous Goods Code
IOELV	Indicative occupational exposure limit value
IPPC	Integrated pollution prevention and control
ISO	International Standards Organisation
ITS	Integrated testing strategy
LC50	Median Lethal Concentration. The atmospheric concentration found to be lethal to 50 percent of a group of test animals exposed for the specified time period.
LCLO	Lethal concentration low. The lowest concentration of a substance in air reported to have caused death in humans or animals. The reported concentrations may be entered for periods of exposure that are less than 24 hr (acute) or greater than 24 hr (subacute and chronic).
LCS	Life cycle stage
LD50	Median Lethal Dose. The dose found to be lethal in 50 percent of a group of test animals when administered by the specified route, e.g., oral or dermal.
LDLO	Lethal dose low. The lowest dose of a substance introduced by any route, other than inhalation, reported to have caused death in humans or animals.
LED10	Lowest confidence limit of the ED10
LEL	Lower Explosive (Flammable) Limit. Lowest concentration (lowest percentage of the substance in air) that will produce a flash of fire when an ignition source (heat, electric arc, or flame) is present.

LEV	Local exhaust ventilation
LMS	Linear multistage model
LOQ	Limit of quantitation
M/I	Manufacturer / importer
MAAC	Maximum Acceptable Ambient Concentration. The maximum allowable twenty-four hour average concentration, in ambient air, of a toxic air contaminant.
mg	Milligram (1/1000, 10-3, of a gram).
mg/kg	Milligram per kilogram. Dosage used in toxicology testing to indicate a dose administered per kg of body weight.
mg/m3	Milligram per cubic meter of air. mg/m3 = ppm x MW/24.45 at 25 C.
Microgram (ug)	One-millionth (10-6) of a gram.
Micrometer (um)	One-millionth (10-6) of a meter; often referred to as a micron.
Millimeter (mm)	1/1000 of a meter.
ml	Milliliter. 1/1000 of a liter. A metric unit of capacity, for all practical purposes equal to 1 cubic centimeter. One cubic inch is about 16 ml.
mm Hg	A measure of pressure in millimeters of a mercury column above a reservoir, or difference of level in a U-tube.
MMAD	Mass median aerodynamic diameter
MoA	Mode of action
MoE	Margin of exposure
mppcf	Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques (OSHA).
MTD	Maximum tolerated dose
n-	Normal.Used as a prefix in chemical names signifying a straight-chain structure.
NACE	Nomenclature générale des activités économiques dans les Communautés Européennes
NAEC	No adverse effect concentration
NAEL	No adverse effect level
NLP	No-Longer Polymer
NOAEL	No observed adverse effect level
NOEL	No observed effect level
NOx	A general formula for oxides of nitrogen (NO,NO2). They react with moisture in the respiratory tract to produce acids that corrode and irritate tissue, causing congestion and pulmonary edema. Symptoms of acute exposure can develop over 6 to 24 hours. Chronic exposure to low levels can cause irritation, cough, headache, and tooth corrosion. Exposure to 5 to 50 ppm of NO2 can cause slowly evolving pulmonary edema. Commonly produced by combustion processes, including motor vehicle engines.
OC	Operational condition
OEL	Occupational Exposure Limit. The most restrictive eight-hour time weighted average concentration specified for workroom air selected from either the 1986-1987 Threshold Limit Values and Biological Exposure Indices as adopted by the American Conference of Governmental Industrial Hygienists; the Recommended Standards for Occupational Exposure set forth in the July 1985 summary of National Institute for Occupational Safety and Health Recommendations for Occupational Health Standards; or the 1986 Workplace Environmental Exposure Levels set forth by the American Industrial Hygiene Association.
OR	Odds ratio; the ratio of the odds of an event occurring in one group to the odds of it occurring in another group
ORL	Lowest confidence limit of the OR
OU	Operational unit
PBPK	Physiologically-based pharmacokinetic modelling
PBT	Persistent, Bioaccumulative and Toxic
PBT	Persistent, bioaccumulative, toxic
PC	Chemical product category
PCB	Polychlorinated Biphenyl. Pathogenic and teratogenic compound used as a heat transfer medium. It accumulates in tissue.
PEC	Predicted environmental concentration

PEL	Permissible Exposure Limit. Legally enforced exposure limit for a substance established by OSHA. The PEL indicates the permissible concentration of air contaminants to which nearly all workers may be repeatedly exposed 8 hours a day, 40 hours a week, over a working lifetime (40 years), without adverse effects.
PHLEGM	Thick mucous from the respiratory passage.
PNEC	Predicted No-Effect Concentration
PNEC	Predicted no-effect concentration
POx	A general term for the several oxides of phosphorus.
PPE	Personal Protection Equipment. Devices or clothing worn to help insulate a worker from direct exposure to hazardous materials. Examples include gloves and respirators.
PPM	Parts per million. Unit for measuring concentration of a gas or vapor in air. Parts of the gas or vapor in a million parts of air. Also used to indicate the concentration of a particular substance in a liquid or solid.
PROC	Process category
psia	Pounds per square inch absolute.
psig	Pounds per square inch gauge (i.e., above atmospheric pressure).
QSPR	Quantitative structure–property relationships
RC	Risk characterization
RCR	Risk characterization ratio
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations Concerning the International Carriage of Dangerous Goods by Rail
RMM	Risk management measure
RQ	Reportable Quantity. Amount of material that when spilled must be reported to the Federal, State, and local authorities under CERCLA, EPCRA, and the CWA.
RR	Relative risk
RRL	Lower bound exposure value associated with the RR-value of 1.1
RSS	Robust study summaries
RTECS	Registry of Toxic Effects of Chemical Substances. Published by NIOSH. Presents basic toxicity data on thousands of materials. Objective is to identify "all known toxic substances" and to reference original studies.
S.I. No. 619 of 2001	Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001
SARA	Superfund Amendments and Reauthorization Act. Signed into law October 17, 1986. Title III of SARA is known as the Emergency Planning and Community Right-to-Know Act of 1986. A revision and extension of CERCLA, SARA is intended to encourage and support local and state emergency planning efforts. It provides citizens and local governments with information about potential chemical hazards in their communities. SARA calls for facilities that store hazardous materials to provide officials and citizens with data on the types (flammables, corrosives, etc.); amounts on hand (daily, yearly); and their specific locations. Facilities are to prepare and submit inventory lists, MSDSs, and tier 1 and 2 inventory forms. The disaster in Bhopal, India in 1987 added impetus to the passage of this law.
SCBA	Self-contained breathing apparatus.
SDS	Safety data sheet
SI	The International System of Units
SIEF	Substance information exchange forum
SME	Small and medium enterprise
SMR	Standardised mortality ratio
SMRL	Lower bound exposure value associated with the SMR-value of 1.1
SOx	Oxides of sulfur where x equals the number of oxygen atoms.
sRV	Standard respiratory volume
STEL	Short-term exposure limit.
STEV	Short-term exposure value.
STP	Sewage treatment plant
SU	Sectors of use
SVHC	Substance of Very High Concern

T25	The chronic dose rate that will give 25% of the animals' tumours at a specific tissue site after correction for spontaneous incidence, within the standard life time of that species
TARIC	Tarif intégré des Communautés Européennes
TG	Test Guideline
TLV	Threshold Limit Value. Airborne concentration of substances established by the American Conference of Governmental Industrial Hygienists, which represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.
TLV-C	Ceiling limit, concentration that should not be exceeded even instantaneously.
TLV-STEL	Short term exposure limit, maximum concentration for a continuous 15-minute exposure period.
TLV-TWA	Time-weighted average, concentration for a normal 8-hour work day or 40-hour work week.
TPQ	Threshold Planning Quantity. Per 40 CFR 302. The amount of material at a facility that requires emergency planning and notification per CERCLA.
TSCA	Toxic Substances Control Act. Public Law PL 94-469. Found in 40 CFR 700-799. EPA has jurisdiction. Effective January 1, 1977. Controls the exposure to and use of raw industrial chemicals not subject to other laws. Chemicals are to be evaluated prior to use and can be controlled based on risk. The act provides for a listing of all chemicals that are to be evaluated prior to manufacture or use in the US.
TTC	Threshold of toxicological concern
TWA	Time-weighted average exposure is the airborne concentration of a material to which a person is exposed, averaged over the total exposure time, generally the total workday (8 to 12 hours) .
TWA	Time-weighted average exposure
UC	Use category
UCN	Use code Nordic
UDS	Use descriptor system
UEC	Use and exposure categories
UEL	Upper Explosive (Flammable) Limit. Highest concentration (highest percentage of the substance in air) that will produce a flash of fire when an ignition source (heat, electric arc, or flame) is present.
UN	United Nations
UN RTDG	UN Recommendations on the Transport of Dangerous Goods – Model Regulations. It is regularly updated and amended every two years. More information and the latest revision are available at: http://www.unece.org/trans/danger/publi/unrec/rev13/13nature_e.html
UN-MTC	The UN Manual of Tests and Criteria contains criteria, test methods and procedures to be used for classification of dangerous goods according to the provisions of Parts 2 and 3 of the United Nations Recommendations on the Transport of Dangerous Goods, Model Regulations, as well as of chemicals presenting physical hazards according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). More information and the latest revision are available at: http://www.unece.org/trans/danger/publi/manual/manual_e.html
USE	To package, handle, react, or transfer.
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials as defined in the Guidance on substance identification
VOC	Volatile Organic Compounds. Used in coatings and paint because they evaporate very rapidly.
vPvB	Very Persistent and very Bioaccumulative
WoE	weight of evidence
wRV	Worker respiratory volume

16.6. Indication of changes

Version	Indication of changes	Revision date
1.0.0		13-05-2024

16.6. Additional information

No information available.

Before using this product, ensure that you read its label and understand its properties.

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