



Clax Revoflow Pro Micro Pur-Eco 30X2

Revision: 2022-09-01

Version: 05.2

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

1.1 Product identifier

Trade name: Clax Revoflow Pro Micro Pur-Eco 30X2

UFI: DDT6-V0WD-P009-8V4M

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

Product use:	Laundry detergent. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8b_2

AISE_SWED_PW_1_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Tandur Hf.

Hesthálsi 12, 110 Reykjavík

Tel. 5101200, Email: tandur@tandur.is

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).

Poison Center: (+354) 543-2222

Emergency services: 112.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Dam. 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains Alcohols, C10-16, ethoxylated (7-<15 EO) (C12-15 Pareth-7), subtilisin (Subtilisin)

Hazard statements:

H318 - Causes serious eye damage.

EUH208 - May produce an allergic reaction.

Precautionary statements:

P280 - Wear eye or face protection.

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 CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		30-50
Alcohols, C10-16, ethoxylated (7-<15 EO)	[4]	68002-97-1	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		3-10
sodium sulphate	231-820-9	7757-82-6	01-2119519226-43	Not classified as hazardous		1-3
sodium carboxymethyl cellulose	[4]	9004-32-4	[4]	Not classified as hazardous		1-3
subtilisin	232-752-2	9014-01-1	01-2119480434-38	Acute Tox. 4 (H302) STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		0.1-1

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures**4.1 Description of first aid measures**

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No known effects or symptoms in normal use.
Skin contact:	No known effects or symptoms in normal use.
Eye contact:	Causes severe or permanent damage.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Clax Revoflow Pro Micro Pur-Eco 30X2

Collect mechanically. Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Avoid contact with eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s)	Short term value(s)
subtilisin		0.00006 mg/m ³

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
sodium sulphate	-	-	-	-
sodium carboxymethyl cellulose	-	-	-	-
subtilisin	-	3.6	-	1.8

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium carbonate	-	-	No data available	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-
sodium sulphate	-	-	-	-
sodium carboxymethyl cellulose	No data available	-	No data available	-
subtilisin	0.2 %	-	-	-

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium carbonate	No data available	-	No data available	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-
sodium sulphate	-	-	-	-
sodium carboxymethyl cellulose	No data available	-	No data available	-
subtilisin	0.2 %	-	-	-

Clax Revoflow Pro Micro Pur-Eco 30X2

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	-	-	10	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
sodium sulphate	-	-	20	20
sodium carboxymethyl cellulose	-	-	-	-
subtilisin	-	-	0.00006	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	10	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
sodium sulphate	-	-	12	12
sodium carboxymethyl cellulose	-	-	-	-
subtilisin	-	-	0.000015	-

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium carbonate	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
sodium sulphate	-	-	-	-
sodium carboxymethyl cellulose	-	-	-	-
subtilisin	0.00006	0.000006	-	65

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
sodium carbonate	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-
sodium sulphate	-	-	-	-
sodium carboxymethyl cellulose	-	-	-	-
subtilisin	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic transfer and dilution	AISE_SWED_PW_8b_2	PW	PROC 8b	60	ERC8b

Personal protective equipment

Eye / face protection:**Hand protection:****Body protection:****Respiratory protection:**

Safety glasses or goggles (EN 166).

No special requirements under normal use conditions.

No special requirements under normal use conditions.

If exposure to dust cannot be avoided use: full-face mask (EN 136) with filter type HEPA (N100, Class H14) (EN 1822) or self-contained or compressed air breathing apparatus (EN 137 / EN 138)
Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen.

Environmental exposure controls: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Clax Revoflow Pro Micro Pur-Eco 30X2

Recommended maximum concentration (% w/w): 0.14

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

	Method / remark
Physical state: Solid	
Colour: Speckles , Medium , White	
Odour: Product specific	
Odour threshold: Not applicable	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		
sodium sulphate	1429	Method not given	1013
sodium carboxymethyl cellulose	No data available		
subtilisin	No data available		

	Method / remark
Flammability (solid, gas): Not determined	
Flammability (liquid): Not applicable.	
Flash point (°C): Not applicable.	
Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)	
Lower and upper explosion limit/flammability limit (%): Not determined	See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
subtilisin	-	-

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: Not applicable	
Dilution pH: ≈ 11 (0.14 %)	ISO 4316
Kinematic viscosity: Not determined	Not applicable to solids or gases
Solubility in / Miscibility with water: Soluble	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		
sodium sulphate	186	Method not given	20
sodium carboxymethyl cellulose	Soluble	Method not given	
subtilisin	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Vapour pressure: Not determined

Method / remark
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		
sodium sulphate	No data available		
sodium carboxymethyl cellulose	No data available		
subtilisin	Not applicable		

Relative density: ≈ 1.01 (20 °C)
Relative vapour density: No data available.
Particle characteristics: Not determined.

Method / remark
 OECD 109 (EU A.3)
 Not applicable to solids
 Not relevant to classification of this product.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive.
Oxidising properties: Not oxidising.
Corrosion to metals: Not determined

Not applicable to solids or gases Weight of evidence

9.2.2 Other safety characteristics

No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium carbonate	LD ₅₀	2800	Rat	OECD 401 (EU B.1)		10000
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD ₅₀	≥ 1000		Read across		11000
sodium sulphate	LD ₅₀	10000	Rat	Method not given		Not established
sodium carboxymethyl cellulose	LD ₅₀	> 2500	Rat	Method not given		Not established
subtilisin	LD ₅₀	1800	Rat	OECD 401 (EU B.1)		1.2e+006

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium carbonate	LD ₅₀	> 2000	Rabbit	Method not given		Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD ₅₀	> 2000		Method not given		Not established
sodium sulphate	LD ₅₀	> 2000				Not established
sodium carboxymethyl cellulose	LD ₅₀	> 2000	Rabbit	Method not given		Not established
subtilisin		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC ₅₀	> 2.3 (dust)		Weight of evidence	2
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			
sodium sulphate		No data available			
sodium carboxymethyl cellulose	LC ₅₀	> 5800	Rat	Method not given	
subtilisin		-		Weight of evidence	

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
sodium carbonate	Not established	Not established	Not established	Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not established	Not established	Not established	Not established
sodium sulphate	Not established	Not established	Not established	Not established
sodium carboxymethyl cellulose	Not established	Not established	Not established	Not established
subtilisin	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not irritant	Rabbit	Method not given	
sodium sulphate	No data available			
sodium carboxymethyl cellulose	Not irritant	Rabbit	Method not given	
subtilisin	Mild irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Severe damage	Rabbit	Method not given	
sodium sulphate	No data available			
sodium carboxymethyl cellulose	Not corrosive or irritant	Rabbit	Method not given	
subtilisin	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			
sodium sulphate	No data available			
sodium carboxymethyl cellulose	No data available			
subtilisin	Irritating to respiratory tract			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not sensitising	Guinea pig	Method not given	
sodium sulphate	Not sensitising		Method not given	
sodium carboxymethyl cellulose	No data available			
subtilisin	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			
sodium sulphate	No data available			
sodium carboxymethyl cellulose	No data available			
subtilisin	Sensitising		Weight of evidence	

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given
sodium sulphate	No evidence for mutagenicity		No data available	
sodium carboxymethyl cellulose	No data available		No data available	
subtilisin	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Chinese Hamster Ovary)	No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for carcinogenicity, weight-of-evidence
sodium sulphate	No evidence for carcinogenicity, weight-of-evidence
sodium carboxymethyl cellulose	No data available
subtilisin	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available		Literature		No evidence for teratogenic effects No evidence for reproductive toxicity
sodium sulphate			No data available				No evidence for reproductive toxicity
sodium carboxymethyl cellulose			No data available				
subtilisin			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				
subtilisin		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				

Clax Revoflow Pro Micro Pur-Eco 30X2

subtilisin		No data available				
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Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				
subtilisin		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium carbonate			No data available					
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available					
sodium sulphate			No data available					
sodium carboxymethyl cellulose			No data available					
subtilisin			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available
sodium sulphate	No data available
sodium carboxymethyl cellulose	No data available
subtilisin	Respiratory tract

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available
sodium sulphate	No data available
sodium carboxymethyl cellulose	No data available
subtilisin	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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Clax Revoflow Pro Micro Pur-Eco 30X2

sodium carbonate	LC ₅₀	300	<i>Lepomis macrochirus</i>	Method not given	96
Alcohols, C10-16, ethoxylated (7-<15 EO)	LC ₅₀	> 1-10	<i>Brachydanio rerio</i>	Method not given	96
sodium sulphate	LC ₅₀	81 - 1100	<i>Fish</i>	Method not given	96
sodium carboxymethyl cellulose	LC ₅₀	> 100	<i>Lepomis macrochirus</i> <i>Oncorhynchus mykiss</i>	Method not given	96
subtilisin	LC ₅₀	8.2	<i>Fish</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	200-227	<i>Ceriodaphnia dubia</i>	Method not given	96
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	> 1-10	<i>Daphnia magna</i> Straus	Method not given	48
sodium sulphate	EC ₅₀	4580	<i>Daphnia magna</i> Straus	Method not given	48
sodium carboxymethyl cellulose	EC ₅₀	> 1000	<i>Daphnia</i>	Method not given	
subtilisin	EC ₅₀	0.586	<i>Daphnia</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	> 800	<i>Selenastrum capricornutum</i>		72
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	> 1-10	<i>Desmodesmus subspicatus</i>	Method not given	72
sodium sulphate	EC ₅₀	1900		Non guideline test	120
sodium carboxymethyl cellulose		No data available			
subtilisin	E _r C ₅₀	0.830	Not specified	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			
sodium sulphate		No data available			
sodium carboxymethyl cellulose		No data available			
subtilisin		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	140	Activated sludge	Method not given	
sodium sulphate		No data available			
sodium carboxymethyl cellulose		No data available			
subtilisin		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				
subtilisin		No data available				

Clax Revoflow Pro Micro Pur-Eco 30X2

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₁₀	> 0.1-1	<i>Daphnia sp.</i>	OECD 211		
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				
subtilisin		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				
sodium sulphate		No data available				
sodium carboxymethyl cellulose		No data available				
subtilisin		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium carbonate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	

Clax Revoflow Pro Micro Pur-Eco 30X2

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium carbonate		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
Alcohols, C10-16, ethoxylated (7-<15 EO)	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium sulphate					Not applicable (inorganic substance)
sodium carboxymethyl cellulose		DOC reduction	10-30% in 28 day(s)		Not readily biodegradable.
subtilisin				OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					No data available

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
Alcohols, C10-16, ethoxylated (7-<15 EO)	3.55	QSAR	No bioaccumulation expected	
sodium sulphate	-4.38	Method not given	No bioaccumulation expected	
sodium carboxymethyl cellulose	No data available			
subtilisin	< 0			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				
sodium sulphate	No data available				
sodium carboxymethyl cellulose	No data available				
subtilisin	-			Not relevant, does not bioaccumulate	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				
sodium sulphate	No data available				Potential for mobility in soil, soluble in water
sodium carboxymethyl cellulose	No data available				
subtilisin	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

SECTION 14: Transport information**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations:**

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

phosphates	>= 30 %
non-ionic surfactants	< 5 %
enzymes	

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Seveso - Classification: Not classified

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MSDS7983

Version: 05.2

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Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 8, 16

Clax Revoflow Pro Micro Pur-Eco 30X2**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

- AISE - The International Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet