

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Clax Revoflow Alc 10X1

Revision: 2023-12-12 **Version:** 09.0

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

1.1 Product identifier

Trade name: Clax Revoflow Alc 10X1

UFI: J0P5-C0HU-G00E-R721

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

Product use: Laundry aid .

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_1 AISE_SWED_PW_1_1 AISE_SWED_PW_4_1

1.3 Details of the supplier of the safety data sheet

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

Contact details

Diversey Ltd Weston Favell Centre, Northampton NN3 8PD, United Kingdom Tel: 01604 405311, Fax: 01604 406809 Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible) For medical or environmental emergency only: call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin corrosion, Category 1A (H314) EUH071 Specific target organ toxicity - Single exposure, Category 3 (H335) Serious eye damage, Category 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains disodium metasilicate (Sodium Metasilicate), sodium hydroxide (Sodium Hydroxide), Alcohols, C10-16, ethoxylated (7-<15 EO) (C12-15 Pareth-7)

Hazard statements:

H314 - Causes severe skin burns and eye damage.

EUH071 - Corrosive to the respiratory tract.

Precautionary statements:

P260 - Do not breathe dust.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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		Classification	Notes	Weight
			number			percent
sodium carbonate	207-838-8	497-19-8	01-211948549	Eye irritation, Category 2 (H319)		50-75
			8-19			
disodium metasilicate	229-912-9	6834-92-0	01-211944981	Skin corrosion, Category 1B (H314)		20-30
				Specific target organ toxicity - Single exposure,		
				Category 3 (H335)		
				Serious eye damage, Category 1 (H318)		
				Corrosive to metals, Category 1 (H290)		
sodium hydroxide	215-185-5	1310-73-2	01-211945789	Skin corrosion, Category 1A (H314)		3-10
			2-27	Corrosive to metals, Category 1 (H290)		
Alcohols, C10-16, ethoxylated (7-<15	[4]	68002-97-1	[4]	Acute toxicity - Oral, Category 4 (H302)		1-3
EO)	'			Serious eye damage, Category 1 (H318)		
, and the second				Chronic aquatic toxicity, Category 3 (H412)		

Specific concentration limits

sodium hydroxide:

• Serious eye damage, Category 1 (H318) >= 2% > Eye irritation, Category 2 (H319) >= 0.5%

• Skin corrosion, Category 1A (H314) >= 5% > Skin corrosion, Category 1B (H314) >= 2% > Skin irritation, Category 2 (H315) >= 0.5%

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

General Information: Symptoms of intoxication may even occur after several hours. It is recommended to continue

medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON

CENTRE, doctor or physician.

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off Skin contact:

immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician.

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove Eye contact:

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE,

doctor or physician.

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious Ingestion:

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician.

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: Corrosive to the respiratory tract.

Skin contact: Causes severe burns. Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of

oesophagus and stomach.

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

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

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

Ensure adequate ventilation. 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 adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe dust. Use only outdoors or in a well-ventilated area. 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)	UK - Long term value(s)	UK - Short term value(s)
sodium hydroxide		2 mg/m³

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	-	-	-	-
disodium metasilicate	-	-	-	0.74
sodium hydroxide	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

DNEL/DMEL	dermal	exposure -	 Worker

ı	Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic	

	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
sodium carbonate	-	-	No data available	-
disodium metasilicate	No data available	-	No data available	1.49
sodium hydroxide	2 %	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

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	-
disodium metasilicate	No data available	-	No data available	0.74
sodium hydroxide	2 %	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

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	-
disodium metasilicate	-	-	-	6.22
sodium hydroxide	-	-	1	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

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	-	-	-
disodium metasilicate	-	-	-	1.55
sodium hydroxide	-	-	1	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	=	-

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	-	-	-	-
disodium metasilicate	7.5	1	7.5	1000
sodium hydroxide	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium carbonate	-	-	-	-
disodium metasilicate	-	-	-	-
sodium hydroxide	-	-	-	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

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 $\underline{\quad undiluted\quad}$ 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. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

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_1	PW	PROC 8b	60	ERC8b

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 16321 / EN 166).

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and Hand protection:

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min

Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

Body protection: Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may

occur (EN ISO 13982-1).

If exposure to dust cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or Respiratory protection:

full-face mask (EN 136) with particle filter P1 (EN 143) 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: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.06

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
Automatic application in a dedicated system	AISE SWED PW 4 1	PW	PROC 4	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 Appearance: Powder

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

Not applicable to solids or gases Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
disodium metasilicate	No data available		
sodium hydroxide	> 990	Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	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

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined **Decomposition temperature:** Not applicable.

pH: Not applicable

Dilution pH: > 11 (0.06 %) ISO 4316

Kinematic viscosity: Not applicable to solids or gases

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
disodium metasilicate	350	Method not given	20
sodium hydroxide	1000	Method not given	20
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

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

Method / remark See substance data

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
disodium metasilicate	No data available		
sodium hydroxide	< 1330	Method not given	20
Alcohols, C10-16, ethoxylated (7-<15 EO)	< 0.15		20

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

Relative density: ≈ 1.05 (20 °C)

Relative vapour density: No data available. Particle characteristics: Not determined.

Not applicable to solids or gases

9.2.2 Other safety characteristics

Alkali reserve: ≈ 31.8 (g NaOH / 100g; pH=10)

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

Reacts with acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

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

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 Oral (mg/kg)
sodium carbonate	LD 50	2800	Rat	OECD 401 (EU B.1)		2800
disodium metasilicate	LD 50	770 - 820	Mouse	Method not given	ECHA Dossier 2020	Not established
sodium hydroxide		No data available				Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD 50	300-2000	Rat	Weight of evidence		1000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
sodium carbonate	LD 50	> 2000	Rabbit	Method not given		Not established
disodium metasilicate	LD 50	> 5000	Rat Guinea pig	Method not given		Not established
sodium hydroxide	LD 50	1350	Rabbit	Method not given		Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD 50	> 2000		Method not given		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
disodium metasilicate	LC 50	> 2.06	Rat	Method not given	
sodium hydroxide		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			

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
disodium metasilicate	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	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)	
disodium metasilicate	Corrosive		Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not irritant	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
disodium metasilicate	Corrosive		Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Severe damage	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium metasilicate	Irritating to		Method not given	
	respiratory tract			
sodium hydroxide	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
disodium metasilicate	Not sensitising	Mouse	OECD 429 (EU B.42)	
sodium hydroxide	Not sensitising		Human repeated patch test	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium metasilicate	No data available			
sodium hydroxide	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			

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	
disodium metasilicate	No data available		No data available	
sodium hydroxide	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	Method not given

Carcinogenicity

Carcinogenicity	
Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
disodium metasilicate	No data available
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for carcinogenicity, weight-of-evidence

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				
disodium metasilicate			No data available				
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available		Literature		No evidence for teratogenic effects No evidence for reproductive toxicity

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				
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
sodium hydroxide		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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				
disodium metasilicate		No data available				
sodium hydroxide		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				

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				
disodium metasilicate		No data available				
sodium hydroxide		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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					
disodium metasilicate			No data available					
sodium hydroxide			No data available					
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium metasilicate	Respiratory tract
sodium hydroxide	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium metasilicate	Not applicable
sodium hydroxide	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	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 propertiesEndocrine 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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC 50	300	Lepomis macrochirus	Method not given	96
disodium metasilicate	LC 50	210	Brachydanio rerio	Method not given	96
sodium hydroxide	LC 50	35	Various species	Method not given	96
Alcohols, C10-16, ethoxylated (7-<15 EO)	LC 50	> 1-10	Brachydanio rerio	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	200-227	Ceriodaphnia dubia	Method not given	96
disodium metasilicate	EC 50	1700	Daphnia	Method not given	48
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC 50	> 1-10	Daphnia magna Straus	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	> 800	Selenastrum capricornutum		72
disodium metasilicate	EC 50	207	Chlorella pyrenoidosa	Method not given	72
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC 50	> 1-10	Desmodesmus subspicatus	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data			
		available			
disodium metasilicate		No data			
		available			
sodium hydroxide		No data			
		available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		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			
disodium metasilicate	EC 50	> 100	Activated sludge	Method not given	3 hour(s)
sodium hydroxide		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC 50	140	Activated sludge	Method not given	

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				
disodium metasilicate		No data available				
sodium hydroxide		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				

Aquatic long-term toxicity - crustacea

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

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		
disodium metasilicate	No data available		
sodium hydroxide	No data available		
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

Terrestrial toxicityTerrestrial 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				
sodium hydroxide		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				
sodium hydroxide		No data				
		available				Į.

Terrestrial toxicity - birds, if available:

Torrootrial toxioity birde, il available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
					unie (uays)	
sodium carbonate		No data				
		available				
sodium hydroxide		No data				
,		available				

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

Terrestrial toxicity - soil bacteria, il available.						
Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		soil)				
sodium carbonate		No data				
		available				
sodium hydroxide		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			
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

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

Biodegradation Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
disodium metasilicate					Not applicable (inorganic substance)
sodium hydroxide					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

Ready biodegradability - anaerobic and marine conditions, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

rartition coefficient n-octanol/water (log Kow)								
Ingredient(s)	Value	Method	Evaluation	Remark				
sodium carbonate	No data available		No bioaccumulation expected					
disodium metasilicate	No data available							
sodium hydroxide	No data available		Not relevant, does not bioaccumulate					
Alcohols, C10-16, ethoxylated (7-<15 EO)	3.55	QSAR	No bioaccumulation expected					

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
disodium metasilicate	No data available				
sodium hydroxide	No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
disodium metasilicate	No data available				
sodium hydroxide	No data available				Mobile in soil
Alcohols, C10-16, ethoxylated (7-<15 EO)	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.

European Waste Catalogue: 20 01 15* - alkalines.

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 or ID number: 1823 14.2 UN proper shipping name: Sodium hydroxide, solid, mixture 14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: II

14.5 Environmental hazards: Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Maritime transport in bulk according to IMO instruments: The product is not transported in bulk tankers.

Other relevant information:

ADR

Classification code: C6 Tunnel restriction code: (E) Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

National regulations:

- Regulation (EC) 1907/2006 REACH (UK amended)
- Regulation (EC) 1272/2008 CLP (UK amended)
- Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
 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 Detergents Regulation

polycarboxylates, non-ionic surfactants

< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - 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: MSDS5922 Version: 09.0 Revision: 2023-12-12

Reason for revision:

This data sheet contains changes from the previous version in section(s):, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, 2, 4, 9, 16

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.

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
- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet