

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Clax Profi Forte 36C1

Revision: 2023-07-26 Version: 06.3

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

1.1 Product identifier

Trade name: Clax Profi Forte 36C1

UFI: 0XW0-C05T-T00P-MEUH

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

Laundry detergent. Product use:

For professional use only.

Uses other than those identified are not recommended. Uses advised against:

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1 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 Corr. 1B (H314) Eye Dam. 1 (H318) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains alkyl alcohol ethoxylate (C9-11 Pareth-5-10), disodium/dipotassium metasilicate (Sodium/Potassium Metasilicate), potassium alkylbenzenesulphonate (Potassium Dodecylbenzenesulfonate)

Hazard statements:

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

Precautionary statements:

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	REACH number	Classification	Notes	Weight
alkyl alcohol ethoxylate	[4]	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		10-20
disodium/dipotassium metasilicate	215-687-4 215-199-1	-	[1]	Skin Corr. 1B (H314) STOT SE 3 (H335) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		3-10
tripotassium citrate	212-755-5	866-84-2	[1]	Not classified as hazardous		3-10
potassium alkylbenzenesulphonate	287-337-9	85480-57-5	[1]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)		3-10
potassium hydroxide	215-181-3	1310-58-3	01-2119487136-33	Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290)		0.1-1
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		0.1-1

Specific concentration limits

potassium hydroxide:

- Eye Dam. 1 (H318) >= 2% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%
- Eye Dam. 1 (H318) >= 2% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

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

ATE, if available, are listed in section 11.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required. [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: 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. Get medical attention or advice if

you feel unwell.

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 evelids apart and flush eves 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.

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

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: No known effects or symptoms in normal use.

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

Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders). 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. 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)	UK - Long term value(s)	UK - Short term value(s)
potassium hydroxide		2 mg/m ³
sodium hydroxide		2 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
alkyl alcohol ethoxylate	-	-	-	-

disodium/dipotassium metasilicate	-	•	•	-
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	-	-	-	0.425
potassium hydroxide	-	-	-	-
sodium hydroxide	-	-	-	-

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)
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	1.49
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	No data available	-	No data available	-
potassium hydroxide	No data available	-	No data available	-
sodium hydroxide	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)
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	1.38
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	No data available	-	No data available	-
potassium hydroxide	No data available	-	No data available	-
sodium hydroxide	2 %	-	-	-

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
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	-
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	-	-	-	-
potassium hydroxide	-	-	1	-
sodium hydroxide	-	-	1	-

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
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	-
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	-	-	-	-
potassium hydroxide	-	-	1	-
sodium hydroxide	-	-	1	-

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)
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	-
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	-	-	-	-
potassium hydroxide	-	-	-	-
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
alkyl alcohol ethoxylate	-	-	-	-
disodium/dipotassium metasilicate	-	-	-	-
tripotassium citrate	No data available	No data available	No data available	No data available
potassium alkylbenzenesulphonate	-	-	-	-
potassium hydroxide	-	-	-	-
sodium hydroxide	-	-	-	-

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.

Avoid direct contact and/or splashes where possible. Train personnel. Appropriate organisational controls:

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
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 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

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

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 14605).

Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (% w/w): 0.7

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. No special requirements under normal use conditions. **Body protection:** Respiratory protection: No special requirements under normal use conditions.

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

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: Liquid

Colour: Milky , Medium , Yellow

Odour: Product specific

Odour threshold: Not applicable

Melting point/freezing point (°C): Not determined

Not relevant to classification of this product See substance data

Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
alkyl alcohol ethoxylate	> 232.2	Method not given	(IIFa)
disodium/dipotassium metasilicate	No data available		
tripotassium citrate	No data available		
potassium alkylbenzenesulphonate	No data available		
potassium hydroxide	Not applicable to solids	Method not given	
	or gases		
sodium hydroxide	> 990	Method not given	

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.
Flash point (°C): Not determined
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: ≈ 100 (°C)

pH: >= 11.5 (neat)

Dilution pH: > 11 (0.7 %)

ISO 4316

Kinematic viscosity: Not determined DM-006 Viscosity - Standard

Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyl alcohol ethoxylate	100 Soluble	Method not given	
disodium/dipotassium metasilicate	No data available		
tripotassium citrate	No data available		
potassium alkylbenzenesulphonate	No data available		
potassium hydroxide	No data available		
sodium hydroxide	1000	Method not given	20

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

Method / remark

See substance data

Substance data, vapour pressure

Vapour pressure: Not determined

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
alkyl alcohol ethoxylate	< 10	Method not given	37.8
disodium/dipotassium metasilicate	No data available		
tripotassium citrate	No data available		
potassium alkylbenzenesulphonate	< 1	Read across	
potassium hydroxide	Negligible	Method not given	
sodium hydroxide	< 1330	Method not given	20

Relative density: $\approx 1.18 (20 \,^{\circ}\text{C})$ Relative vapour density: -.

Particle characteristics: No data available.

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: Corrosive

9.2.2 Other safety characteristics

No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

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

May be corrosive to metals. 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 (mg/kg)
alkyl alcohol ethoxylate	LD 50	1400	Rat	Weight of evidence		1400
disodium/dipotassium metasilicate		No data available				Not established
tripotassium citrate		3000		Weight of evidence		3000
potassium alkylbenzenesulphonate	LD 50	1080				1080
potassium hydroxide	LD 50	333	Rat	OECD 425		333
sodium hydroxide		No data available				Not established

Acute dermal toxicity

Acute definal toxicity						
Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
alkyl alcohol ethoxylate	LD 50	2000 - 5000	Rat	Weight of evidence		Not established
disodium/dipotassium metasilicate		No data available				Not established
tripotassium citrate		> 2000		Weight of evidence		Not established
potassium alkylbenzenesulphonate		No data available				Not established
potassium hydroxide		No data available				Not established
sodium hydroxide	LD 50	1350	Rabbit	Method not given		1350

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
disodium/dipotassium metasilicate		No data available			
tripotassium citrate		No data available			
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide		No data available			
sodium hydroxide		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)
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
disodium/dipotassium metasilicate	Not established	Not established	Not established	Not established
tripotassium citrate	Not established	Not established	Not established	Not established
potassium alkylbenzenesulphonate	Not established	Not established	Not established	Not established
potassium hydroxide	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritant		Weight of evidence	
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Corrosive	Rabbit	Draize test	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence OECD 437	
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Corrosive	Rabbit	Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available			
sodium hydroxide	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising		Weight of evidence	
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
sodium hydroxide	Not sensitising		Human repeated patch	
			test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available			
sodium hydroxide	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

	viutagenicity				
Ingredient(s)		Result (in-vitro)	Method	Result (in-vivo)	Method
	3 (,	` ′	(in-vitro)	` ,	(in-vivo)
	alkyl alcohol ethoxylate	No evidence for mutagenicity, negative	OECD 473	No data available	
		test results			
	disodium/dipotassium metasilicate	No data available		No data available	

tripotassium citrate	No data available		No data available	
potassium alkylbenzenesulphonate	No data available		No data available	
	No evidence for mutagenicity, negative test results	Method not given	No data available	
,	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)

Carcinogenicity

Ingredient(s)	Effect		
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results		
disodium/dipotassium metasilicate	No data available		
tripotassium citrate	No data available		
potassium alkylbenzenesulphonate	No data available		
potassium hydroxide	No evidence for carcinogenicity, negative test results		
sodium hydroxide	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
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity
disodium/dipotassium metasilicate			No data available				
tripotassium citrate			No data available				
potassium alkylbenzenesulphonat e			No data available				
potassium hydroxide			No data available				No evidence for reproductive toxicity
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value	Species	Method		
		(mg/kg bw/d)			time (days)	affected
alkyl alcohol ethoxylate	NOAEL	80 - 400		OECD 408 (EU		
				B.26)		
disodium/dipotassium metasilicate		No data				
•		available				
tripotassium citrate		No data				
•		available				
potassium alkylbenzenesulphonate		No data				
		available				
potassium hydroxide		No data				
· •		available				
sodium hydroxide		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
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)	90	
disodium/dipotassium metasilicate		No data available				
tripotassium citrate		No data available				
potassium alkylbenzenesulphonate		No data available				
potassium hydroxide		No data available				
sodium hydroxide		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
alkyl alcohol ethoxylate		No data				
		available				
disodium/dipotassium metasilicate		No data				
		available				

tripotassium citrate	No data available		
potassium alkylbenzenesulphonate	No data available		
potassium hydroxide	No data available		
sodium hydroxide	No data available		

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
alkyl alcohol ethoxylate			No data available					
disodium/dipotassium metasilicate			No data available					
tripotassium citrate			No data available					
potassium alkylbenzenesulphonat e			No data available					
potassium hydroxide			No data available					
sodium hydroxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	No data available
disodium/dipotassium metasilicate	No data available
tripotassium citrate	No data available
potassium alkylbenzenesulphonate	No data available
potassium hydroxide	No data available
sodium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	No data available
disodium/dipotassium metasilicate	No data available
tripotassium citrate	No data available
potassium alkylbenzenesulphonate	No data available
potassium hydroxide	No data available
sodium hydroxide	No data available

Aspiration hazard

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

Potential adverse health effects and symptomsEffects 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)
alkyl alcohol ethoxylate	LC 50	5 - 7	Fish	92/69/EEC, C1, semi-static	96
disodium/dipotassium metasilicate		No data			

		available			
tripotassium citrate		440	Leuciscus idus		
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide	LC 50	80	Various species	Weight of evidence	24
sodium hydroxide	LC 50	35	Various species	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC 50	5.3	Daphnia	92/69/EEC	48
disodium/dipotassium metasilicate		No data available			
tripotassium citrate		1535	Daphnia magna Straus		24
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide	EC 50	30 - 1000	Daphnia magna Straus	Weight of evidence	
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC 50	1.4 - 47	Not specified	92/69/EEC	72
disodium/dipotassium metasilicate		No data available			
tripotassium citrate		425	Scenedesmus quadricauda		
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide		No data available			
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			
disodium/dipotassium metasilicate		No data available			
tripotassium citrate		No data available			
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide		No data available			
sodium hydroxide		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC 50	> 140	Bacteria	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
disodium/dipotassium metasilicate		No data available			
tripotassium citrate		No data available			
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	15 minute(s)
sodium hydroxide		No data available			

Aquatic long-term toxicity
Aquatic long-term toxicity - fish

riquatio forigitorini toxioniy ilon						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed

		(mg/l)			time	
alkyl alcohol ethoxylate	EC 10	8.983	Not specified	Method not	21 day(s)	
				given		
disodium/dipotassium metasilicate		No data				
		available				
tripotassium citrate		No data				
		available				
potassium alkylbenzenesulphonate		No data				
		available				
potassium hydroxide		No data				
		available				
sodium hydroxide		No data				
·		available	1			

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate	EC 10	2.579	Daphnia sp.	Method not given	21 day(s)	
disodium/dipotassium metasilicate		No data available				
tripotassium citrate		No data available				
potassium alkylbenzenesulphonate		No data available				
potassium hydroxide		No data available				
sodium hydroxide		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
alkyl alcohol ethoxylate		No data available				
disodium/dipotassium metasilicate		No data available				
tripotassium citrate		No data available				
potassium alkylbenzenesulphonate		No data available				
potassium hydroxide		No data available				
sodium hydroxide		No data available				

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

refrestrial toxicity - soil invertebrates, including earthwork	iis, ii avaliabi	e.				
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		soil)			(,	
potassium hydroxide		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
potassium hydroxide		No data				
		available				
sodium hydroxide		No data				
·		available	l			

Terrestrial toxicity - birds, if available:

ronounal toxicity birdo, il available.						
Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data available				

Terrestrial toxicity - beneficial insects, if available:

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

	available		
sodium hydroxide	No data		
-	available		

Terrestrial toxicity - soil bacteria, if available:

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

Abiotic degradation - other processes, if available:

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

Biodegradation Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
alkyl alcohol ethoxylate				OECD 301B	Readily biodegradable
disodium/dipotassium metasilicate					Not applicable (inorganic substance)
tripotassium citrate				OECD 301E	Readily biodegradable
potassium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	> 89% 89% in 29 day(s)	Weight of evidence OECD 301B	Readily biodegradable
potassium hydroxide					Not applicable (inorganic substance)
sodium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

	Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
	disodium/dipotassium metasilicate					Not applicable (inorganic
ı						substance)
Ī	sodium hydroxide					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
disodium/dipotassium metasilicate					No data available
potassium hydroxide					No data available
sodium hydroxide					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	
disodium/dipotassium metasilicate	No data available			
tripotassium citrate	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	

sodium hydroxide	No data available	Not relevant, does not	
		bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	
disodium/dipotassium metasilicate	No data available				
tripotassium citrate	No data available				
potassium alkylbenzenesulphonat e	No data available				
potassium hydroxide	No data available				
sodium hydroxide	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
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
disodium/dipotassium metasilicate	No data available				
tripotassium citrate	No data available				
potassium alkylbenzenesulphonate	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil
sodium hydroxide	No data available				Mobile in soil

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.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information



Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: 1719 **14.2 UN proper shipping name**:

Caustic alkali liquid, n.o.s. (disodium-/dipotassium trioxosilicate, sodium-/potassium hydroxide)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: ||| 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: C5 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

15 - 30 % soap 5 - 15 % non-ionic surfactants < 5 % anionic surfactants, phosphonates optical brighteners, perfumes, Limonene, Linalool

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: MS1000888 Version: 06.3 Revision: 2023-07-26

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 8, 9, 11, 12, 14, 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.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.

End of Safety Data Sheet