

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Easyfoam VF32

Revision: 2022-12-06

Version: 01.1

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

1.1 Product identifier

Trade name: Easyfoam VF32

UFI: M5EJ-K156-000X-TDEU

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

 Product use:
 Open plant cleaning chemical.

Uses advised against:

Open plant cleaning chemical. For industrial use only.. Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_IS_8b_1 AISE_SWED_IS_4_1 AISE_SWED_IS_7_4 AISE_SWED_IS_7_5 AISE_SWED_IS_13_3

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. 1A (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains sodium hydroxide (Sodium Hydroxide), sodium hypochlorite (active chlorine) (Sodium Hypochlorite), amines, C12-14 (even numbered)-alkyldimethyl, N-oxides (Lauramine oxide)

Hazard statements:

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260 - Do not breathe vapours.

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 percent
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		3-10
sodium hypochlorite (active chlorine)	231-668-3	7681-52-9	01-2119488154-34	EUH031 Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)		1-3
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	931-292-6	308062-28-4	01-2119490061-47	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		1-3

Specific concentration limits

sodium hydroxide:

• Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5% • Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

sodium hypochlorite (active chlorine): • EUH031 >= 5%

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

ATE, if available, are listed in section 11. 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.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. 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. 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 effe	ects, both acute and delayed
Inhalation:	May cause bronchospasm in chlorine sensitive individuals.
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

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). 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 vapours. 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.

Comah - Lower Tier requirements (tonnes): 100 Comah - Upper Tier requirements (tonnes): 200

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/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 hydroxide	-	-	-	-
sodium hypochlorite (active chlorine)	-	-	-	0.26
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	0.44

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 hydroxide	2 %	-	-	-
sodium hypochlorite (active chlorine)	-	-	0.5 %	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	- %	11

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 hydroxide	2 %	-	-	-
sodium hypochlorite (active chlorine)	-	-	0.5 %	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	- %	5.5

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 hydroxide	-	-	1	-
sodium hypochlorite (active chlorine)	3.1	3.1	1.55	1.55
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	6.2

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 hydroxide	-	-	1	-
sodium hypochlorite (active chlorine)	3.1	3.1	1.55	1.55
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	1.53

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 hydroxide	-	-	-	-
sodium hypochlorite (active chlorine)	0.00021	0.000042	0.00026	0.03
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.0335	0.00335	0.0335	24

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium hydroxide	-	-	-	-
sodium hypochlorite (active chlorine)	-	-	-	-
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	5.24	0.524	1.02	-

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 <u>undiluted</u> 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_IS_8b_1	IS	PROC 8b	60	ERC4

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:	If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or 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. Specific applications tools may be available to limit exposure. Please refer to the product information sheet for the possibilities. Apply technical measures to comply with the occupational exposure limits, if available.

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

Recommended maximum concentration (% w/w): 11

Appropriate engineering controls: Provide a good standard of general ventilation. Ensure that foam equipment does not generate respirable particles.

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

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application by dipping, soaking, pouring	AISE_SWED_IS_13_3	IS	PROC 13	240	ERC4
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a
Foam spraying	AISE_SWED_IS_7_4	IS	PROC 7	480	ERC4
Spray application	AISE_SWED_IS_7_5				

Personal protective equipment Safety glasses or goggles (EN 166) are always recommended for foam applications. Eye / face protection: Hand protection: Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. 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 In consultation with the supplier of protective gloves a different type providing similar protection may be chosen. **Body protection:** No special requirements under normal use conditions. Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or **Respiratory protection:** aerosols should be avoided. Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

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: Clear , Pale , Yellow Odour: Chlorine Odour threshold: Not applicable Melting point/freezing point (°C): Not determined Not relevant to classification of this product Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
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sodium hydroxide	> 990	Method not given	
sodium hypochlorite (active chlorine)	Product decomposes before boiling	Method not given	1013
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	> 100	Method not given	

Flammability (solid, gas): Not applicable to liquids Flammability (liquid): Not flammable. Flash point (°C): > 93 °C 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:		
Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
	(% VOI)	(% VOI)
sodium hypochlorite (active chlorine)	-	-

Autoignition temperature: Not determined Decomposition temperature: Not applicable. **pH:** >= 11.5 (neat) **Dilution pH:** > 11 (11 %) Kinematic viscosity: Not determined Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water Ingredient(s) Value Method Temperature (g/l) (°C) sodium hydroxide Method not given 1000 20 sodium hypochlorite (active chlorine) Soluble amines, C12-14 (even numbered)-alkyldimethyl, N-oxides 409.5 Soluble Method not given 20

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

Method / remark

Method / remark

OECD 109 (EU A.3)

Not applicable to liquids.

Not relevant to classification of this product

See substance data

Substance data, vapour pressure

Vapour pressure: Not determined

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium hydroxide	< 1330	Method not given	20
sodium hypochlorite (active chlorine)	Negligible .?		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	< 10	Method not given	25

Relative density: ≈ 1.13 (20 °C) Relative vapour density: No data available. 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

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.

Method / remark

closed cup

See substance data

Method / remark

ISO 4316 ISO 4316

10.5 Incompatible materials

May be corrosive to metals. Reacts with acids. Reacts with acids releasing toxic chlorine gas.

10.6 Hazardous decomposition products Chlorine.

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 hydroxide		No data available				Not established
sodium hypochlorite (active chlorine)	LD 50	1100	Rat	OECD 401 (EU B.1)	90	Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> 1064 1064	Rat	OECD 401 (EU B.1)		26000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	ATE
		(mg/kg)			time (h)	(mg/kg)
sodium hydroxide	LD 50	1350	Rabbit	Method not given		Not established
sodium hypochlorite (active chlorine)	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)		Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> -	Rat	OECD 402 (EU B.3)		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide		No data available			
sodium hypochlorite (active chlorine)	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		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 hydroxide	Not established	Not established	Not established	Not established
sodium hypochlorite (active chlorine)	Not established	Not established	Not established	Not established
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Not established	Not established	Not established	Not established

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
sodium hypochlorite (active chlorine)	Corrosive	Rabbit	OECD 404 (EU B.4)	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	Corrosive	Rabbit	Method not given	
sodium hypochlorite (active chlorine)	Severe damage	Rabbit	OECD 405 (EU B.5)	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredi	ent(s)	Result	Species	Method	Exposure time
sodium hy	droxide	No data available			

sodium hypochlorite (active chlorine)	Irritating to respiratory tract		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available		

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hydroxide	Not sensitising		Human repeated patch	
			test	
sodium hypochlorite (active chlorine)	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			Buehler test	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
	_		Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hydroxide	No data available			
sodium hypochlorite (active chlorine)	Not sensitising			
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	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)
-	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
sodium hypochlorite (active chlorine)	No evidence for mutagenicity	```	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
sodium hypochlorite (active chlorine)	No evidence for carcinogenicity, negative test results
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
sodium hypochlorite (active chlorine)	NOAEL	Developmental toxicity Impaired fertility	5 (CI)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
amines, C12-14 (even numbered)-alkyldimeth yl, N-oxides	NOAEL	Teratogenic effects	25	Rat	Non guideline test		

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 hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)	NOAEL	50	Rat	OECD 408 (EU	90	
				B.26)		
amines, C12-14 (even numbered)-alkyldimethyl,	NOAEL	-		OECD 422,		
N-oxides				oral		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		No data				
		available				
amines, C12-14 (even numbered)-alkyldimethyl,		No data				
N-oxides		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		No data				
		available				
amines, C12-14 (even numbered)-alkyldimethyl,		No data				
N-oxides		available				

Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
sodium hydroxide			No data					
-			available					
sodium hypochlorite			No data					
(active chlorine)			available					
amines, C12-14 (even			No data					
numbered)-alkyldimeth			available					
yl, N-oxides								

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
sodium hypochlorite (active chlorine)	Not applicable
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium hydroxide	No data available
sodium hypochlorite (active chlorine)	Not applicable
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	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)
sodium hydroxide	LC 50	35	Various species	Method not given	96
sodium hypochlorite (active chlorine)	LC 50	0.06	Oncorhynchus mykiss	Method not given	96
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LC 50	2.67-3.46	Pimephales promelas	Similar to OECD 203	96

Aquatic short-term toxicity - crustacea					
Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/l)			time (h)
sodium hydroxide	EC 50	40.4	Ceriodaphnia	Method not given	48
			sp.		
sodium hypochlorite (active chlorine)	EC 50	0.035	Ceriodaphnia	OECD 202 (EU C.2)	48

			dubia		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 50	3.1	Daphnia	OECD 202, static	48
			magna Straus		

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25
sodium hypochlorite (active chlorine)	NOEC	0.0021	Not specified	Method not given	168
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Er C 50	0.143	Pseudokirchner iella subcapitata	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium hydroxide		No data			
		available			
sodium hypochlorite (active chlorine)	EC 50	0.026	Crassostrea	Method not given	2
			virginica		
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data			
		available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium hydroxide		No data available			
sodium hypochlorite (active chlorine)		0.375	Activated sludge	Method not given	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 10	> -	Bacteria	Non guideline test	- hour(s)

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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data available				
sodium hypochlorite (active chlorine)	NOEC	0.04	Menidia pelinsulae	Method not given	96 hour(s)	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	-	Pimephales promelas	Method not given	- day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)	NOEC	0.007	Crassostrea	Method not	15 day(s)	
			virginica	given		
amines, C12-14 (even numbered)-alkyldimethyl,	NOEC	-	Daphnia	OECD 211,	- day(s)	
N-oxides			magna	flow-through		

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw sediment)			time (days)	
sodium hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		No data				
		available				
amines, C12-14 (even numbered)-alkyldimethyl,		No data				
N-oxides		available				

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw soil)			time (days)	
sodium hydroxide		No data				
socium nycioxide		available				
sodium hypochlorite (active chlorine)		No data				
		available				

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		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 hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		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 hydroxide		No data				
		available				
sodium hypochlorite (active chlorine)		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 hydroxide	13 second(s)	Method not given	Rapidly photodegradable	
sodium hypochlorite (active chlorine)	115 day(s)	Indirect photo-oxidation		

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium hydroxide	No data available			
sodium hypochlorite (active chlorine)	No data available			

Abiotic degradation - other processes, if available:

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

Biodegradation Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium hydroxide					Not applicable (inorganic substance)
sodium hypochlorite (active chlorine)					Not applicable (inorganic substance)
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Activated sludge, aerobe	CO ₂ production	90 % 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 hydroxide					No data available
sodium hypochlorite (active chlorine)					No data available

Degradation in relevant environmental compartments, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium hydroxide	No data available		Not relevant, does not	
			bioaccumulate	
sodium hypochlorite (active chlorine)	-3.42	Method not given	No bioaccumulation expected	
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	<-	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
sodium hypochlorite (active chlorine)	No data available				
amines, C12-14 (even numbered)-alkyldimeth yl, N-oxides					

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 hydroxide	No data available				Mobile in soil
sodium hypochlorite (active chlorine)	1.12				High potential for mobility in soil
amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available				Low mobillity 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:

European Waste Catalogue:

Empty packaging Recommendation: Suitable cleaning agents: 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. 20 01 15* - alkalines.

Dispose of observing national or local regulations. 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: 1719 14.2 UN proper shipping name:

Caustic alkali liquid, n.o.s. (sodium hydroxide, sodium hypochlorite)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: 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

chlorine-based bleaching agents, non-ionic surfactants, polycarboxylates

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.

< 5 %

Comah - classification: E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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

Version: 01.1

SDS code: MS1005598

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

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:

H290 - May be corrosive to metals.
H302 - Harmful if swallowed.

- H315 Causes skin irritation.
- H318 Causes serious eye damage. · H400 - Very toxic to aquatic life.

Revision: 2022-12-06

- H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 EUH031 Contact with acids liberates toxic gas.

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

- LC50 Lethal Concentration, 50% / Median Lethal Concentration
 LC5 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
 DVEC Develoted bloc Effect Concentration
- 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