

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Hypofoam VF6

Revision: 2021-03-21

Version: 05.0

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

1.1 Product identifier

Trade name: Hypofoam VF6

UFI: E503-X0FR-W00U-DSQS

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

Product use:

Surface disinfectant. Foam cleaner. for general surface disinfection. for food contact surface disinfection. For professional and industrial use only. Uses other than those identified are not recommended.

Uses advised against:

 \mbox{SWED} - Sector-specific worker exposure description : <code>AISE_SWED_PW_1_1</code>

AISE_SWED_PW_1_1 AISE_SWED_IS_1_1 AISE_SWED_PW_4_2 AISE_SWED_IS_4_1 AISE_SWED_IS_7_4 AISE_SWED_IS_7_5

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

EUH031 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)

Hazard statements:

EUH031 - Contact with acids liberates toxic gas.

H314 - Causes severe skin burns and eye damage.

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

H290 - May be corrosive to metals.

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	231-668-3	7681-52-9	[6]	EUH031 Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)		3-10
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	931-292-6	-	01-2119490061-47	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		3-10

Specific concentration limits

sodium hydroxide:

• Met. Corr. 1 (H290) >= 0.5%

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:

• Met. Corr. 1 (H290) >= 5%

• EUH031 >= 5%

Eye contact: Ingestion:

Workplace exposure limit(s), if available, are listed in subsection 8.1. ATE, if available, are listed in section 11.

[6] Exempted: biocidal active. See Article 15a 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:	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. Take off
	immediately all contaminated clothing and wash it before reuse. Immediately call a POISON
	CENTRE, doctor or physician.
Eye contact:	Hold evelids 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
5	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.

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. In case of an incident in a confined area wear suitable respiratory protection. Wear suitable protective clothing. Wear suitable gloves. Wear eye/face protection.

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. Keep from freezing. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Seveso - Lower Tier requirements (tonnes): 200 Seveso - Upper Tier requirements (tonnes): 500

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	Value(3)	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 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	-	-	-	0.26
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	0.44

DNEL 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	-	-	0.5 %	-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	0.27 %	11

DNEL 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	-	-	0.5 %	-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available	-	0.27 %	5.5

DNEL 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	3.1	3.1	1.55	1.55
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	6.2

DNEL 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	3.1	3.1	1.55	1.55
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	1.53

Environmental exposure

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium hydroxide	-	-	-	-
sodium hypochlorite	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	-	-	-	-
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 application in a dedicated closed system	AISE_SWED_IS_1_1	IS	PROC 1	480	ERC4
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	60	ERC8a

Personal protective equipment

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:	No special requirements under normal use conditions. Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection:	Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted.
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Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (% w/w): 10

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	ERC
				(min)	
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
Automatic application in a dedicated system	AISE_SWED_PW_4_2	PW	PROC 4	480	ERC8a

Respiratory protection:	No special requirements under normal use conditions.
Body protection:	No special requirements under normal use conditions.
	be chosen. Chemical-resistant protective gloves (EN 374) are always recommended for foam applications.
	In consultation with the supplier of protective gloves a different type providing similar protection may
	thickness: ≥ 0.7 mm
	Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material
	supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Hand protection:	Verify instructions regarding permeability and breakthrough time, as provided by the gloves
Eye / face protection:	Safety glasses or goggles (EN 166) are always recommended for foam applications.
Personal protective equipment	

Environmental exposure controls:

posure 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 / rem	ark	
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
Initial boiling point and boiling range (°C): Not determined	See substance	e data	
Substance data, boiling point			
Ingredient(s)	Value	Method	Atmospheric pressure

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	(°C)		(hPa)
sodium hydroxide	> 990	Method not given	
sodium hypochlorite	Product decomposes	Method not given	1013
	before boiling		
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): 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

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Ingredient(s)	Lower limit	Upper limit
	(% vol)	(% vol)
sodium hypochlorite	-	-

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

Substance data, solubility in water

Ingredient(s)	(g/l)	Method	lemperature (°C)
sodium hydroxide	1000	Method not given	20
sodium hypochlorite	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

Vapour pressure: Not determined

Substance data, vapour pressure

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

Relative density: ≈ 1.17 (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

Method / remark OECD 109 (EU A.3)

Not relevant to classification of this product Not applicable to liquids.

Weight of evidence

9.2.2 Other safety characteristics

No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

Method / remark

See substance data

Method / remark

ISO 4316

Method / remark See substance data

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	LD 50	1100	Rat	OECD 401 (EU B.1)	90	Not established
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> 300 - 2000	Rat	OECD 401 (EU B.1)		16000

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	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)		Not established
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD 50	> 5000	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	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	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	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	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			

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sodium hypochlorite	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	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	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)
sodium hydroxide	No evidence for mutagenicity, negative test results	1 1	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
sodium hypochlorite	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	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	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	NOAEL	50	Rat	OECD 408 (EU	90	
				B.26)		
Amines, C12-14 (even numbered)-alkyldimethyl,	NOAEL	13		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		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		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					
			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	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	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	LC 50	0.06	Oncorhynchus mykiss	Method not given	96
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LC 50	> 2.67 - 3.46	Fish	OECD 203, static	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	EC 50	0.035	Ceriodaphnia	OECD 202 (EU C.2)	48
			dubia		

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Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 50	3.1	Daphnia	OECD 202 (EU C.2)	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	Method not given	0.25
			m		
			phosphoreum		
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 50	0.1428	Not specified	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	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		0.375	Activated sludge	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC 10	> 24	Bacteria	Non guideline test	18 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - lish	-					
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hydroxide		No data				
		available				
sodium hypochlorite	NOEC	0.04	Menidia	Method not	96 hour(s)	
			pelinsulae	given	. ,	
Amines, C12-14 (even numbered)-alkyldimethyl,	NOEC	0.42	Not specified		302 day(s)	
N-oxides						

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hydroxide		No data				
		available				
sodium hypochlorite	NOEC	0.007	Crassostrea	Method not	15 day(s)	
			virginica	given		
Amines, C12-14 (even numbered)-alkyldimethyl,	NOEC	0.7	Daphnia	Method not	21 day(s)	
N-oxides			magna	given		

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		No data				
		available				
Amines, C12-14 (even numbered)-alkyldimethyl,		No data				
N-oxides		available				

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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	115 day(s)	Indirect photo-oxidation		

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium hydroxide					Not applicable (inorganic substance)
sodium hypochlorite					Not applicable (inorganic substance)
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		CO ₂ production	90% in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if 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	-3.42	Method not given	No bioaccumulation expected	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	0.93	(EC) 440/2008, A.8	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hydroxide	No data available				
sodium hypochlorite	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	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:

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

European Waste Catalogue:

Empty packaging **Recommendation:** Suitable cleaning agents: 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: Marine pollutant: Yes 14.6 Special precautions for user: 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Other relevant information:

ADR Classification code: C5 Tunnel restriction code: E Hazard identification number: 80 EmS: F-A. S-B

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No. 1907/2006 REACH
 Regulation (EC) No 1272/2008 CLP
- Regulation (EC) No. 648/2004 Detergents regulation
- Regulation (EU) No 528/2012 on biocidal products substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation

(EU) 2018/605

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

Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants, phosphonates, anionic surfactants disinfectants

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

< 5 %

Seveso - Classification: 41. Mixtures of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of Annex I

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: MS1000988

Revision: 2021-03-21

This data sheet contains changes from the previous version in section(s):, 3, 8, 9, 11, 10, 12, 14, 16, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006

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.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage. • H400 - Very toxic to aquatic life.
- 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
- LCS Life cycle stage
- LD50 Lethal Dose, 50% / Median Lethal dose
- NOAEL No observed adverse effect level
- NOEL No observed effect level
 OECD Organization for Economic Cooperation and Development
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- PROC Process categories
- REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative

End of Safety Data Sheet