

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Clax Hypo 42A1

Revision: 2020-12-13 **Version:** 03.0

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

1.1 Product identifier

Trade name: Clax Hypo 42A1

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

Identified uses:

For professional and industrial use only.

AISE-P107 - Laundry aid (gassing). Automatic process

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

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

2.2 Label elements



Signal word: Danger.

Contains sodium hypochlorite (Sodium Hypochlorite), 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. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium hypochlorite	231-668-3	7681-52-9	01-2119488154-34	EUH031 Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)		3-10
Sodium chlorate	231-887-4	7775-09-9	No data available	Ox. Sol. 1 (H271) Acute Tox. 4 (H302) Aquatic Chronic 2 (H411)		3-10
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		1-3

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

- [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. [2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
- [3] Exempted: Annex V of Regulation (EC) No 1907/2006.
- [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.

ATE, if available, are listed in section 11.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

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

immediately all contaminated clothing and wash it before reuse. Immediately call a POISON

CENTRE, doctor or physician.

Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, Eye contact:

if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or

physician.

Rinse mouth. Immediately drink 1 glass of water. Do NOT induce vomiting. Keep at rest. Ingestion:

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: 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

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

6.2 Environmental precautions

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

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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 hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

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

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		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 hypochlorite	-	-	-	0.26
Sodium chlorate	No data available	No data available	No data available	36
sodium hydroxide	-	-	-	-

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 hypochlorite	-	-	0.5 %	-
Sodium chlorate	No data available	No data available	No data available	No data available
sodium hydroxide	2 %	-	-	-

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 hypochlorite	-	-	0.5 %	-
Sodium chlorate	No data available	No data available	No data available	No data available
sodium hydroxide	2 %	-	-	-

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 hypochlorite	3.1	3.1	1.55	1.55
Sodium chlorate	No data available	No data available	No data available	No data available
sodium hydroxide	No data available	-	1	-

DNFL inhalatory exposure - Consumer (mg/m3)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium hypochlorite	3.1	3.1	1.55	1.55
Sodium chlorate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	1	-

Environmental exposure

Environmental exposure - PNFC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium hypochlorite	0.00021	0.000042	0.00026	0.03
Sodium chlorate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium hypochlorite	-	-	-	No data available
Sodium chlorate	No data available	No data available	No data available	No data available
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 <u>undiluted</u> product:

Appropriate engineering controls: 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.

Personal protective equipment

Body protection:

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.

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.

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 , Yellow

Odour: Chlorine

Odour threshold: Not applicable

pH > 12 (neat)

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

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

Not relevant to classification of this product

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium hypochlorite	Product decomposes before boiling	Method not given	1013
Sodium chlorate	No data available		
sodium hydroxide	> 990	Method not given	

Method / remark

Flammability (liquid): Not determined. Flash point (°C): Not applicable. Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2)

closed cup

Evaporation rate: Not determined

Flammability (solid, gas): Not determined Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

oubstance data, nammability or expresive illinte, il available.		
Ingredient(s)	Lower limit	Upper limit
	(% vol)	(% vol)
sodium hypochlorite	-	-

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium hypochlorite	Negligible .?		
Sodium chlorate	No data available		
sodium hydroxide	< 1330	Method not given	20

Method / remark

Vapour density: Not determined Relative density: ≈ 1.18 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium hypochlorite	Soluble		
Sodium chlorate	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

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

Viscosity: Not determined

Explosive properties: Not explosive. Oxidising properties: Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals: Corrosive

Not relevant to classification of this product

Weight of evidence

Substance data, dissociation constant, if available:

Ingredient(s)	Value	Method	Temperature (°C)
sodium hypochlorite	7.53 (pKa)	Method not given	

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Reacts with acids releasing toxic chlorine gas. Keep away from acids.

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): >5000

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 hypochlorite	LD 50	1100	Rat	OECD 401 (EU B.1)	90	1100
Sodium chlorate		No data available				Not established
sodium hydroxide		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	ATE
		(mg/kg)			time (h)	(mg/kg)
sodium hypochlorite	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)		Not established
Sodium chlorate		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)
sodium hypochlorite	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
Sodium chlorate		No data			
		available			
sodium hydroxide		No data			
		available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust	ATE - inhalation, mist	ATE - inhalation,	ATE - inhalation, gas
	(mg/l)	(mg/l)	vapour (mg/l)	(mg/l)
sodium hypochlorite	Not established	Not established	Not established	Not established
Sodium chlorate	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skill illitation and corrosivity				
Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	

Sodium chlorate	No data available			
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	
Sodium chlorate	No data available			
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Irritating to			
	respiratory tract			
Sodium chlorate	No data available			
sodium hydroxide	No data available			

Sensitisation Sensitisation by skin contact

.,				
Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
	_		Buehler test	
Sodium chlorate	No data available			
sodium hydroxide	Not sensitising		Human repeated patch	
·	_		test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium hypochlorite	Not sensitising			
Sodium chlorate	No data available			
sodium hydroxide	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity

Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
sodium hypochlorite	No evidence for mutagenicity	OECD 471 (EU	No evidence for mutagenicity, negative	OECD 474 (EU
		B.12/13)	test results	B.12)
Sodium chlorate	No data available		No data available	
sodium hydroxide	No evidence for mutagenicity, negative	DNA repair test	No evidence for mutagenicity, negative	OECD 474 (EU
	test results	on rat	test results	B.12) OECD
		hepatocytes		475 (EU B.11)
		OECD 473		

Carcinogenicity

Ingredient(s)	Effect
sodium hypochlorite	No evidence for carcinogenicity, negative test results
Sodium chlorate	No data available
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
sodium hypochlorite	NOAEL	Developmental toxicity Impaired fertility		Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
Sodium chlorate			No data available				
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	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hypochlorite	NOAEL	50	Rat	OECD 408 (EU	90	
				B.26)		
Sodium chlorate		No data				
		available				

sodium hydroxide	No data		
	available		

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hypochlorite		No data				
		available				
Sodium chlorate		No data				
		available				
sodium hydroxide		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
sodium hypochlorite		No data				
		available				
Sodium chlorate		No data				
		available				
sodium hydroxide		No data				
· ·		available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium hypochlorite			No data available					
Sodium chlorate			No data available					
sodium hydroxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium hypochlorite	Not applicable
Sodium chlorate	No data available
sodium hydroxide	No data available

STOT-repeated exposure

3101-lepeated exposure	
Ingredient(s)	Affected organ(s)
sodium hypochlorite	Not applicable
Sodium chlorate	No data available
sodium hydroxide	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium hypochlorite	LC 50	0.06	Oncorhynchus mykiss	Method not given	96
Sodium chlorate		No data available			
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)
sodium hypochlorite	EC 50	0.035	Ceriodaphnia dubia	OECD 202 (EU C.2)	48
Sodium chlorate	EC 50	> 1000	Daphnia magna Straus		48
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)
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168
Sodium chlorate		129			
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)
sodium hypochlorite	EC 50	0.026	Crassostrea virginica	Method not given	2
Sodium chlorate		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
sodium hypochlorite		0.375	Activated sludge	Method not given	
Sodium chlorate		No data available			
sodium hydroxide		No data available			

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
sodium hypochlorite	NOEC	0.04	Menidia	Method not	96 hour(s)	
21			pelinsulae	given	()	
Sodium chlorate		No data				
		available				
sodium hydroxide		No data				
		available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium hypochlorite	NOEC	0.007	Crassostrea virginica	Method not given	15 day(s)	
Sodium chlorate		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
sodium hypochlorite		No data available			-	
Sodium chlorate		No data available				
sodium hydroxide		No data available			-	

Terrestrial toxicity<u>Terrestrial toxicity - soil invertebrates, including earthworms, if available:</u>

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

	available			
sodium hydroxide	No data		-	
	available			

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

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

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hypochlorite	115 day(s)	Indirect photo-oxidation		
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium hypochlorite					Not applicable (inorganic substance)
Sodium chlorate					Not applicable (inorganic substance)
sodium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	
Sodium chlorate	No data available			
sodium hydroxide	No data available		Not relevant, does not	

	bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium hypochlorite	No data available				
Sodium chlorate	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
sodium hypochlorite	1.12				High potential for mobility in soil
Sodium chlorate	No data available				
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 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.

20 01 15* - alkalines. **European Waste Catalogue:**

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: 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

EU regulations:

- Regulation (EC) No 1272/2008 CLP
 Regulation (EC) No. 1907/2006 REACH
- Regulation (EC) No. 648/2004 Detergents regulation

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

UFI: 3R81-404U-E001-YF8N

Ingredients according to EC Detergents Regulation 648/2004

5 - 15 % chlorine-based bleaching agents phosphonates < 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

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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:

- H271 May cause fire or explosion; strong oxidiser.
- H290 May be corrosive to metals
- H302 Harmful if swallowed.
- · H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- 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
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
- PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative
- ATE Acute Toxicity Estimate

End of Safety Data Sheet