According to Regulation (EC) No 1907/2006

## Maskinopvask PrimeSource Ren med klor

**Revision:** 2018-03-17 **Version:** 02.1

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

#### 1.1 Product identifier

Trade name: Maskinopvask PrimeSource Ren med klor

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

#### Identified uses:

For professional use only.

AISE-P202 - Dishwash product. Automatic process

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

#### 1.3 Details of the supplier of the safety data sheet

MultiLine A/S

#### **Contact details**

Kirkebjergvej 17, 4180 Sorø Tlf. 7010 7700 www.multiline.dk info@multiline.dk

#### 1.4 Emergency telephone number

Diversey local operating company

This International SDS is for information only. It does not meet all applicable regulatory requirements and does not replace the relevant statutory data sheet for your country.

## SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

EUH031 Skin Corr. 1A (H314) Aquatic Chronic 3 (H412) Met. Corr. 1 (H290)

## 2.2 Label elements



Signal word: Danger.

Contains potassium hydroxide (Potassium Hydroxide).

#### Hazard statements:

EUH031 - Contact with acids liberates toxic gas.

H314 - Causes severe skin burns and eye damage.

H412 - Harmful 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 XIII

## SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
potassium hydroxide	215-181-3	1310-58-3	01-2119487136-33	Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290)		10-20
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)		1-3
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		0.1-1

<sup>\*</sup> Polymer

For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

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.

## **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 re-use. Immediately call a POISON

CENTRE, doctor or physician.

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several 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. Do NOT induce vomiting. Keep at rest.

Immediately call a POISON CENTRE, doctor or physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

### 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

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

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

## 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, 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

Use neutralising agent. Absorb onto dry sand or similar inert material. Ensure adequate ventilation.

#### 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. 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. Do not breathe vapours. 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.

#### 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)	EU - Long term value(s)	EU - Short term value(s)	UK - Long term value(s)	UK - Short term value(s)
potassium hydroxide				2 mg/m <sup>3</sup>
sodium hydroxide				2 mg/m <sup>3</sup>

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
potassium hydroxide	-	-	-	-
sodium hypochlorite	-	-	-	0.26
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)
potassium hydroxide	No data available	-	No data available	-
sodium hypochlorite	-	-	0.5 %	-
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)
potassium hydroxide	No data available	-	No data available	-
sodium hypochlorite	-	-	0.5 %	-
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
potassium hydroxide	-	-	1	-
sodium hypochlorite	3.1	3.1	1.55	1.55
sodium hydroxide	=	-	1	-

DNEL inhalatory exposure - Consumer (mg/m³)

		Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
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	effects	effects	effects	effects
potassium hydroxide	-	-	1	-
sodium hypochlorite	3.1	3.1	1.55	1.55
sodium hydroxide	-	-	1	-

## **Environmental exposure**

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
potassium hydroxide	-	-	-	-
sodium hypochlorite	0.00021	0.000042	0.00026	0.03
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
potassium hydroxide	-	-	-	-
sodium hypochlorite	-	-	-	0.00026
sodium hydroxide	-	-	-	-

#### 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

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.

Personal protective equipment

Eye / face protection:

Safety glasses or goggles (EN 166).

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.

Mear sham

**Body protection:** 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.

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

Recommended maximum concentration (%): 0.4

Appropriate engineering controls: No special requirements under normal use conditions. Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection:No special requirements under normal use conditions.Hand protection:No special requirements under normal use conditions.Body protection:No special requirements under normal use conditions.Respiratory protection:No special requirements under normal use conditions.

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

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Liquid Colour: Clear, Pale, 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)
potassium hydroxide	140	Method not given	
sodium hypochlorite	Product decomposes before boiling	Method not given	1013
sodium hydroxide	> 990	Method not given	

Method / remark

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

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

Substance data, flammability or explosive limits, if available:

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

#### Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
potassium hydroxide	2300	Method not given	20
sodium hypochlorite	1700	Method not given	20
sodium hydroxide	< 1330	Method not given	20

Method / remark

Vapour density: Not determined Relative density:  $\approx$  1.21 (20 °C)

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Substance data, solubility in water			
Ingredient(s)	Value	Method	Temperature
	(g/l)		(°C)
potassium hydroxide	No data available		
sodium hypochlorite	Soluble		
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):

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)
potassium hydroxide	LD 50	333	Rat	OECD 425	
sodium hypochlorite	LD 50	> 1100	Rat		90
sodium hydroxide		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
potassium hydroxide		No data available			
sodium hypochlorite	LD 50	> 20000	Rabbit	OECD 402 (EU B.3)	
sodium hydroxide		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium hydroxide		No data available			
sodium hypochlorite	LC 50	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
sodium hydroxide		No data available			

#### Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
potassium hydroxide	Corrosive	Rabbit	Draize test	
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
potassium hydroxide	Corrosive	Rabbit	Method not given	
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

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

sodium hydroxide	No data available		
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#### Sensitisation

Sensitisation by skin contact				
Ingredient(s)	Result	Species	Method	Exposure time (h)
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
sodium hydroxide	Not sensitising		Human repeated patch test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
potassium hydroxide	No data available			
sodium hypochlorite	No data available			
sodium hydroxide	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)
potassium hydroxide	No evidence for mutagenicity, negative	Method not	No data available	
	test results	given		
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 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

Carcinogenicity	
Ingredient(s)	Effect
potassium hydroxide	No evidence for carcinogenicity, negative test results
sodium hypochlorite	No evidence for carcinogenicity, negative test results
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
potassium hydroxide			No data available				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
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 (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
potassium hydroxide		No data				
		available				
sodium hypochlorite	NOAEL	50	Rat	OECD 408 (EU	90	
				B.26)		
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
potassium hydroxide		No data				
		available				
sodium hypochlorite		No data				
		available				
sodium hydroxide		No data				
•		available			1	1

Sub-chronic inhalation toxicity

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

	available		
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Chronic toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium hydroxide	LC 50	80	Various species	Method not given	24
sodium hypochlorite	LC 50	0.06	Oncorhynchus mykiss	Method not given	96
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)
potassium hydroxide	EC 50	30 - 1000	Daphnia	Method not given	-
			magna Straus		
sodium hypochlorite	EC 50	0.035	Ceriodaphnia	OECD 202 (EU C.2)	48
			dubia		
sodium hydroxide	EC 50	40.4	Ceriodaphnia	Method not given	48
			sp.		

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
potassium hydroxide		No data available			-
sodium hypochlorite	NOEC	0.0021	Not specified	Method not given	168
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25

Aquatic short-term toxicity - marine species

Aquatic short-term toxicity - manne species					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
potassium hydroxide		No data available			-
sodium hypochlorite	EC 50	0.026	Crassostrea virginica	Method not given	2

sodium hydroxide				No d availa						-
npact on sewage plants - toxicity to bacteria										
Ingredient(s)				Value (mg/l)		Inocu	lum	ı	Method	Exposui
potassium hydroxid		EC 50 22		2	Photobacteriu Mett m phosphoreum		Meth	od not given	15 minute(s	
sodium hypochlorite	е			0.3		Activa Sluc	ated	Meth	od not given	
sodium hydroxide				No d		3/44	ige			
quatic long-term toxicity		•			•					
quatic long-term toxicity - fish Ingredient(s)	Endpoint	Value	Sį	pecies	Meth	nod	Expo		Effects ob	served
potassium hydroxide		(mg/l) No data					tim	ie		
sodium hypochlorite	NOEC	available 0.04	Λ.	lenidia	Metho		96 hc	ur(s)		
sodium hydroxide		No data available	1	linsulae	giv	en				
quatic long-term toxicity - crustacea										
Ingredient(s)	Endpoint	Value (mg/l)		pecies	Meth	nod	Expo tim		Effects ob	served
potassium hydroxide		No data available								
sodium hypochlorite		No data available								
sodium hydroxide		No data available								
quatic toxicity to other aquatic benthic organism	s, including sedimen	t-dwelling or	ganisms, i	f available	<b>)</b> :					
Ingredient(s)	Endpoint	Value (mg/kg d sedimen	w .	ecies	Meth	nod	Expo		Effects ob	served
potassium hydroxide		No data	1				-			
sodium hypochlorite		No data available	1				-			
sodium hydroxide		No data available	1				-			
errestrial toxicity	`									
errestrial toxicity - soil invertebrates, including e Ingredient(s)	arthworms, if availab Endpoint	le: Value (mg/kg d soil)		ecies	Meth	nod	Expo		Effects ob	served
potassium hydroxide		No data					-			
sodium hypochlorite		No data available	1		1		-			
sodium hydroxide		No data available	1				-			
	I	_ available	<u> </u>				1			
errestrial toxicity - plants, if available: Ingredient(s)	Endpoint	Value (mg/kg d soil)		oecies	Meth	nod	Expo		Effects ob	served
potassium hydroxide		No data available					-			
sodium hypochlorite		No data	1		1		-			
sodium hydroxide		available No data available	1				-			
errestrial toxicity - birds, if available:										
Ingredient(s)	Endpoint	Value	Sį	oecies	Meth	nod	Expo		Effects ob	served
potassium hydroxide		No data available					Linie (			
sodium hypochlorite		No data	1		1		-			
sodium hydroxide		available No data available	1				-			
errestrial toxicity - beneficial insects, if available	<del>'</del> :				•		•			
Ingredient(s)	Endpoint	Value	Sı	ecies	Meth	nod	Expo	sure	Effects ob	served

	(mg/kg dw soil)	ti	ime (days)	
notopolium hudrovida				
potassium hydroxide	No data		-	
	available			
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
potassium hydroxide		No data available			-	
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

Ready biodegradability - aerobic conditions

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

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

Bioconcentration factor (BCF)

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

## 12.4 Mobility in soil

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
potassium hydroxide	No data available				Low potential for adsorption to soil
sodium hypochlorite	1.12				High potential for mobility in soil
sodium hydroxide	No data available				Mobile in soil

#### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

## 12.6 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused The concentrated contents or contaminated packaging should be disposed of by a certified handler products: 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. (potassium hydroxide, 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: No

Marine pollutant: No

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.

#### Ingredients according to EC Detergents Regulation 648/2004

5 - 15% phosphates chlorine-based bleaching agents < 5%

#### 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: MS1001026 Version: 02.1 Revision: 2018-03-17

#### Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

#### Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

# 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.
- 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.
  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**