Safety Data Sheet

According to Regulation (EC) No 1907/2006

Suma Dip K1

Revision: 2021-02-14 **Version:** 08.0

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

1.1 Product identifier
Trade name: Suma Dip K1

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

Product use: Dish wash product.
For professional use only.

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

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_8a_1
AISE_SWED_PW_13_2
AISE_SWED_PW_19_1

UFI: 8TE4-40D6-6006-D9RA

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

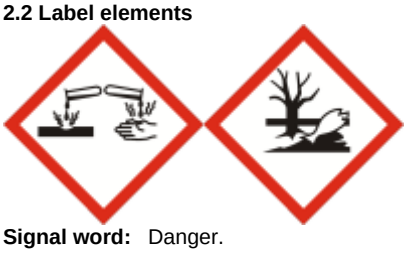
1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

EUH031
Skin Corr. 1B (H314)
Eye Dam. 1 (H318)
Aquatic Acute 1 (H400)
Aquatic Chronic 2 (H411)
Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains disodium/dipotassium metasilicate (Sodium/Potassium Metasilicate), sodium hypochlorite (Sodium Hypochlorite)

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
disodium/dipotassium metasilicate	215-687-4 215-199-1	[1]	[1]	Skin Corr. 1B (H314) STOT SE 3 (H335) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		10-20
sodium hypochlorite	231-668-3	7681-52-9	01-2119488154-34	EUH031 Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290)		3-10
potassium hydroxide	215-181-3	1310-58-3	01-2119487136-33	Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290)		0.1-1
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)		0.1-1

Specific concentration limits
potassium hydroxide:
• Met. Corr. 1 (H290) >= 2%
• Eye Dam. 1 (H318) >= 2% > Eye Irrit. 2 (H319) >= 1%
• Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
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 eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

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

4.2 Most important symptoms and 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
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
Ensure adequate ventilation. Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe vapours. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

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

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
potassium hydroxide		2 mg/m³

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
disodium/dipotassium metasilicate	-	-	No data available	-
sodium hypochlorite	-	-	-	0.26
potassium hydroxide	-	-	-	-
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)
disodium/dipotassium metasilicate	-	-	-	1.49
sodium hypochlorite	-	-	0.5 %	-
potassium hydroxide	No data available	-	No data available	-
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)
disodium/dipotassium metasilicate	-	-	-	1.38
sodium hypochlorite	-	-	0.5 %	-
potassium hydroxide	No data available	-	No data available	-
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
disodium/dipotassium metasilicate	No data available	No data available	No data available	No data available
sodium hypochlorite	3.1	3.1	1.55	1.55
potassium hydroxide	-	-	1	-
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
disodium/dipotassium metasilicate	No data available	No data available	No data available	No data available
sodium hypochlorite	3.1	3.1	1.55	1.55
potassium hydroxide	-	-	1	-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	-	-	1.53

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
disodium/dipotassium metasilicate	No data available	No data available	No data available	No data available
sodium hypochlorite	0.00021	0.000042	0.00026	0.03
potassium hydroxide	-	-	-	-
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)
disodium/dipotassium metasilicate	No data available	No data available	No data available	No data available
sodium hypochlorite	-	-	-	No data available
potassium hydroxide	-	-	-	-
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 undiluted product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the undiluted product:

Contributing scenario, undiluted	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 1.6

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

REACH use scenarios considered for the diluted product:

Contributing scenario, diluted	SWED	LCS	PROC	Duration (min)	ERC
Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_2	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a

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: Should not reach sewage water or drainage ditch undiluted.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical State: Liquid
Colour: Clear , Pale , Yellow
Odour: Chlorine
Odour threshold: Not applicable
Melting point/freezing point (°C): Not determined — Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined — See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
disodium/dipotassium metasilicate	No data available		
sodium hypochlorite	Product decomposes before boiling	Method not given	1013
potassium hydroxide	Not applicable to solids or gases	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	> 100	Method not given	

	Method / remark
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	See substance data

Substance data, flammability or explosive limits, if available:

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

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH > 11 (neat)	ISO 4316
Kinematic viscosity: Not determined	
Solubility in / Miscibility with Water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
disodium/dipotassium metasilicate	No data available		
sodium hypochlorite	Soluble		
potassium hydroxide	No data available		
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	409.5 Soluble	Method not given	20

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

	Method / remark
Vapour pressure: Not determined	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
disodium/dipotassium metasilicate	No data available		
sodium hypochlorite	Negligible .?		
potassium hydroxide	Negligible	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	< 10	Method not given	25

	Method / remark
Relative density: ≈ 1.22 (20 °C)	OECD 109 (EU A.3)
Relative vapour density: No data available.	Not relevant to classification of this product
Particle characteristics: No data available.	Not applicable to liquids.

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 — 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.

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): >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)
disodium/dipotassium metasilicate		No data available				Not established
sodium hypochlorite	LD_{50}	1100	Rat	OECD 401 (EU B.1)	90	Not established
potassium hydroxide	LD_{50}	333	Rat	OECD 425		34000
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	LD_{50}	> 300 - 2000	Rat	OECD 401 (EU B.1)		83000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
disodium/dipotassium metasilicate		No data available				Not established
sodium hypochlorite	LD_{50}	> 20000	Rabbit	OECD 402 (EU B.3)		Not established
potassium hydroxide		No data available				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)
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite	LC_{50}	> 10.5 (vapour)	Rat	OECD 403 (EU B.2)	1
potassium hydroxide		No data available			
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)
disodium/dipotassium metasilicate	Not established	Not established	Not established	Not established
sodium hypochlorite	Not established	Not established	Not established	Not established
potassium hydroxide	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
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	Corrosive	Rabbit	OECD 404 (EU B.4)	
potassium hydroxide	Corrosive	Rabbit	Draize test	
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
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	Severe damage	Rabbit	OECD 405 (EU B.5)	

potassium hydroxide	Corrosive	Rabbit	Method not given	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	Irritating to respiratory tract			
potassium hydroxide	No data available			
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
potassium hydroxide	Not sensitising	Guinea pig	Method not given	
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
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	Not sensitising			
potassium hydroxide	No data available			
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)
disodium/dipotassium metasilicate	No data available		No data available	
sodium hypochlorite	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
potassium hydroxide	No evidence for mutagenicity, negative test results	Method not given	No data available	
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
disodium/dipotassium metasilicate	No data available
sodium hypochlorite	No evidence for carcinogenicity, negative test results
potassium hydroxide	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
disodium/dipotassium metasilicate			No data available				
sodium hypochlorite	NOAEL	Developmental toxicity Impaired fertility	5 (Cl)	Rat	OECD 414 (EU B.31), oral OECD 415 (EU B.34), oral		No evidence for reproductive toxicity
potassium hydroxide			No data available				No evidence for reproductive toxicity
Amines, C12-14 (even numbered)-alkyldimethyl, 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
disodium/dipotassium metasilicate		No data available				
sodium hypochlorite	NOAEL	50	Rat	OECD 408 (EU B.26)	90	
potassium hydroxide		No data				

		available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOAEL	13		OECD 422, oral		

Sub-chronic dermal toxicity

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

Sub-chronic inhalation toxicity

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

STOT-single exposure

Ingredient(s)	Affected organ(s)
disodium/dipotassium metasilicate	No data available
sodium hypochlorite	Not applicable
potassium hydroxide	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
disodium/dipotassium metasilicate	No data available
sodium hypochlorite	Not applicable
potassium hydroxide	No data available
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

Ingredient(s)	Effect
disodium/dipotassium metasilicate	No data available
sodium hypochlorite	No data available
potassium hydroxide	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data 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)
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite	LC_{50}	0.06	*Oncorhynchus mykiss*	Method not given	96
potassium hydroxide	LC_{50}	80	*Various species*	Weight of evidence	24
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 (mg/l)	Species	Method	Exposure time (h)
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite	EC_{50}	0.035	*Ceriodaphnia dubia*	OECD 202 (EU C.2)	48
potassium hydroxide	EC_{50}	30 - 1000	*Daphnia magna Straus*	Weight of evidence	-
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	EC_{50}	3.1	*Daphnia magna Straus*	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite	NOEC	0.0021	*Not specified*	Method not given	168
potassium hydroxide		No data available			
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)
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite	EC_{50}	0.026	*Crassostrea virginica*	Method not given	2
potassium hydroxide		No data available			-
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
disodium/dipotassium metasilicate		No data available			
sodium hypochlorite		0.375	*Activated sludge*	Method not given	
potassium hydroxide	EC_{50}	22	*Photobacterium phosphoreum*	Method not given	15 minute(s)
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 - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium/dipotassium metasilicate		No data available				
sodium hypochlorite	NOEC	0.04	*Menidia pelinsulae*	Method not given	96 hour(s)	
potassium hydroxide		No data				

		available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	NOEC	0.42	*Not specified*		302 day(s)	

Aquatic long-term toxicity - crustacea

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

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
disodium/dipotassium metasilicate		No data available				
sodium hypochlorite		No data available			-	
potassium hydroxide		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity

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

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hypochlorite		No data available			-	
potassium hydroxide		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		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			-	
potassium hydroxide		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed

		soil)				
sodium hypochlorite		No data available			-	
potassium hydroxide		No data available			-	
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides		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		

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
disodium/dipotassium metasilicate					Not applicable (inorganic substance)
sodium hypochlorite					Not applicable (inorganic substance)
potassium hydroxide					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:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
disodium/dipotassium metasilicate					Not applicable (inorganic substance)

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
disodium/dipotassium metasilicate	No data available			
sodium hypochlorite	-3.42	Method not given	No bioaccumulation expected	
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	
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
disodium/dipotassium metasilicate	No data available				
sodium hypochlorite	No data available				
potassium hydroxide	No data available				
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	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
disodium/dipotassium metasilicate	No data available				
sodium hypochlorite	1.12				High potential for mobility in soil
potassium hydroxide	No data available				Low potential for adsorption to 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

Ingredient(s)	Effect
disodium/dipotassium metasilicate	No data available
sodium hypochlorite	No data available
potassium hydroxide	No data available
Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	No data available

12.7 Other adverse effects
No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.
European Waste Catalogue: 20 01 15* - alkalines.

Empty packaging
Recommendation: Dispose of observing national or local regulations.
Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)
14.1 UN number: 1719
14.2 UN proper shipping name:
Caustic alkali liquid, n.o.s. (disodium-/dipotassium trioxosilicate , sodium hypochlorite)
14.3 Transport hazard class(es):
Transport hazard class (and subsidiary risks): 8
14.4 Packing group: III
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. 1907/2006 - REACH

• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 648/2004 - Detergents regulation
• 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
phosphates, chlorine-based bleaching agents, non-ionic surfactants < 5 %

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.

Seveso - Classification: E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MSDS3415 **Version:** 08.0 **Revision:** 2021-02-14

Reason for revision:
Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 14, 16

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

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.
• 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
• 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