



Suma Frit D9.1

Revision: 2022-03-20

Version: 09.0

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

1.1 Product identifier

Trade name: Suma Frit D9.1

UFI: 33D4-00K8-2009-5G31

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

Product use: Fryer cleaner.
Drain cleaner.
Uses advised against: For professional use only.
Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_1_1
AISE_SWED_PW_8a_1
AISE_SWED_PW_10_2
AISE_SWED_PW_13_1
AISE_SWED_PW_19_2

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Corr. 1A (H314)
EUH071
Eye Dam. 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains sodium hydroxide (Sodium Hydroxide), disodium metasilicate (Sodium Metasilicate), sodium alkylbenzenesulphonate (Sodium Dodecylbenzenesulfonate)

Hazard statements:

H314 - Causes severe skin burns and eye damage.
EUH071 - Corrosive to the respiratory tract.

Precautionary statements:

P260 - Do not breathe dust.

Suma Frit D9.1

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		30-50
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		10-20
disodium metasilicate	229-912-9	6834-92-0	01-2119449811-37	Skin Corr. 1B (H314) STOT SE 3 (H335) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		10-20
sodium alkylbenzenesulphonate	270-115-0	68411-30-3	01-2119489428-22	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		1-3

Specific concentration limits

sodium hydroxide:

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

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

ATE, if available, are listed in section 11.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information:

If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE, doctor or physician.

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:

Corrosive to the respiratory tract.

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.

Suma Frit D9.1

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation. Collect mechanically. 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 advised 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 dust. 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.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
sodium hydroxide		2 mg/m ³

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values**Human exposure**

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	-	-	-	-
sodium hydroxide	-	-	-	-
disodium metasilicate	-	-	-	0.74
sodium alkylbenzenesulphonate	-	-	-	0.425

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
---------------	--------------------	-----------------------	-------------------	----------------------

Suma Frit D9.1

	effects	effects (mg/kg bw)	effects	effects (mg/kg bw)
sodium carbonate	-	-	No data available	-
sodium hydroxide	2 %	-	-	-
disodium metasilicate	No data available	-	No data available	1.49
sodium alkylbenzenesulphonate	-	-	-	119

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium carbonate	No data available	-	No data available	-
sodium hydroxide	2 %	-	-	-
disodium metasilicate	No data available	-	No data available	0.74
sodium alkylbenzenesulphonate	-	-	?	42.5

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	-	-	10	-
sodium hydroxide	-	-	1	-
disodium metasilicate	-	-	-	6.22
sodium alkylbenzenesulphonate	-	-	-	6

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium carbonate	10	-	-	-
sodium hydroxide	-	-	1	-
disodium metasilicate	-	-	-	1.55
sodium alkylbenzenesulphonate	-	-	-	1.5

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
sodium carbonate	-	-	-	-
sodium hydroxide	-	-	-	-
disodium metasilicate	7.5	1	7.5	1000
sodium alkylbenzenesulphonate	0.268	0.0268	0.0167	3.43

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
sodium carbonate	-	-	-	-
sodium hydroxide	-	-	-	-
disodium metasilicate	-	-	-	-
sodium alkylbenzenesulphonate	8.1	6.8	35	-

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. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

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

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a
Manual transfer and dilution	AISE_SWED_PW_1_1	PW	PROC 1	60	ERC8a

Personal protective equipment

Suma Frit D9.1

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.
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 ISO 13982-1).
Respiratory protection:	If exposure to dust cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen.
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 5

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_2	PW	PROC 10	480	ERC8a
Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_1	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_2	PW	PROC 19	480	ERC8a

Personal protective equipment

Eye / face protection:	No special requirements under normal use conditions.
Hand protection:	Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. Repeated or prolonged contact: 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.
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: Solid	
Appearance: Powder	
Colour: White	
Odour: Product specific	
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	Not applicable to solids or gases

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
sodium hydroxide	> 990	Method not given	
disodium metasilicate	No data available		
sodium alkylbenzenesulphonate	No data available		

Flammability (solid, gas): Not determined
Flammability (liquid): Not applicable.
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

Method / remark

Substance data, flammability or explosive limits, if available:

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: Not applicable
Dilution pH: > 11 (5 %)
Kinematic viscosity: Not determined
Solubility in / Miscibility with Water: Soluble

Method / remark

ISO 4316
 Not applicable to solids or gases

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
sodium hydroxide	1000	Method not given	20
disodium metasilicate	350	Method not given	20
sodium alkylbenzenesulphonate	> 250		

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

Vapour pressure: Not determined

Method / remark

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
sodium hydroxide	< 1330	Method not given	20
disodium metasilicate	No data available		
sodium alkylbenzenesulphonate	No data available		

Relative density: ≈ 1.00 (20 °C)
Relative vapour density: No data available.
Particle characteristics: Not determined.

Method / remark

OECD 109 (EU A.3)
 Not applicable to solids
 Not relevant to classification of this product.

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: Not determined

Not applicable to solids or gases

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.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

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

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium carbonate	LD ₅₀	2800	Rat	OECD 401 (EU B.1)		9300
sodium hydroxide		No data available				Not established
disodium metasilicate	LD ₅₀	770 - 820	Mouse	Method not given	ECHA Dossier 2020	Not established
sodium alkylbenzenesulphonate	LD ₅₀	1080	Rat	OECD 401 (EU B.1)		23000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
sodium carbonate	LD ₅₀	> 2000	Rabbit	Method not given		Not established
sodium hydroxide	LD ₅₀	1350	Rabbit	Method not given		Not established
disodium metasilicate	LD ₅₀	> 5000	Rat Guinea pig	Method not given		Not established
sodium alkylbenzenesulphonate	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC ₅₀	> 2.3 (dust)		Weight of evidence	2
sodium hydroxide		No data available			
disodium metasilicate	LC ₅₀	> 2.06	Rat	Method not given	
sodium alkylbenzenesulphonate		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
sodium carbonate	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established
disodium metasilicate	Not established	Not established	Not established	Not established
sodium alkylbenzenesulphonate	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
disodium metasilicate	Corrosive		Method not given	
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
disodium metasilicate	Corrosive		Method not given	
sodium alkylbenzenesulphonate	Corrosive	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium hydroxide	No data available			
disodium metasilicate	Irritating to respiratory tract		Method not given	
sodium alkylbenzenesulphonate	Not irritating to respiratory tract			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
sodium hydroxide	Not sensitising		Human repeated patch test	
disodium metasilicate	Not sensitising	Mouse	OECD 429 (EU B.42)	
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium hydroxide	No data available			
disodium metasilicate	No data available			
sodium alkylbenzenesulphonate	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
disodium metasilicate	No data available		No data available	
sodium alkylbenzenesulphonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
disodium metasilicate	No data available
sodium alkylbenzenesulphonate	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
disodium metasilicate			No data available				
sodium alkylbenzenesulphonate	NOAEL	Teratogenic effects	300	Rat	Non guideline test		No known significant effects or critical hazards

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium hydroxide		No data available				
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
sodium alkylbenzenesulphonate		No data				

Suma Frit D9.1

		available				
--	--	-----------	--	--	--	--

Sub-chronic dermal toxicity

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

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium hydroxide	No data available
disodium metasilicate	No data available
sodium alkylbenzenesulphonate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium hydroxide	No data available
disodium metasilicate	No data available
sodium alkylbenzenesulphonate	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

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

11.2 Information on other hazards**11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information**12.1 Toxicity**

No data is available on the mixture.

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

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC ₅₀	300	<i>Lepomis macrochirus</i>	Method not given	96
sodium hydroxide	LC ₅₀	35	Various species	Method not given	96
disodium metasilicate	LC ₅₀	210	<i>Brachydanio rerio</i>	Method not given	96
sodium alkylbenzenesulphonate	LC ₅₀	1.67	Fish	EPA-OPPTS 850.1075	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	200-227	<i>Ceriodaphnia dubia</i>	Method not given	96
sodium hydroxide	EC ₅₀	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48
disodium metasilicate	EC ₅₀	1700	<i>Daphnia</i>	Method not given	48
sodium alkylbenzenesulphonate	LC ₅₀	2.9	<i>Daphnia</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC ₅₀	> 800	<i>Selenastrum capricornutum</i>		72
sodium hydroxide	EC ₅₀	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25
disodium metasilicate	EC ₅₀	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
sodium alkylbenzenesulphonate	E _b C ₅₀	47.3	Not specified	Non guideline test	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			
sodium hydroxide		No data available			
disodium metasilicate		No data available			
sodium alkylbenzenesulphonate		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
sodium hydroxide		No data available			
disodium metasilicate	EC ₅₀	> 100	Activated sludge	Method not given	3 hour(s)
sodium alkylbenzenesulphonate	EC ₅₀	550	Bacteria	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium hydroxide		No data available				
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate	NOEC	0.23	<i>Oncorhynchus mykiss</i>	Method not given	72 day(s)	

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
---------------	----------	--------------	---------	--------	---------------	------------------

Suma Frit D9.1

sodium carbonate		No data available				
sodium hydroxide		No data available				
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate	NOEC	1.41	<i>Daphnia magna</i>	OECD 211		

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 carbonate		No data available				
sodium hydroxide		No data available				
disodium metasilicate		No data available				
sodium alkylbenzenesulphonate		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 carbonate		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 carbonate		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 carbonate		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 carbonate		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 carbonate		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 carbonate	No data available			
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh	Method	Evaluation	Remark
---------------	-------------------------	--------	------------	--------

	water		
sodium carbonate	No data available		Rapidly hydrolysible
sodium hydroxide	No data available		

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
sodium carbonate		No data available			
sodium hydroxide		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
sodium hydroxide					Not applicable (inorganic substance)
disodium metasilicate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

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

Degradation in relevant environmental compartments, if available:

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

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
disodium metasilicate	No data available			
sodium alkylbenzenesulphonate	3.32	Method not given	Low potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
sodium hydroxide	No data available				
disodium metasilicate	No data available				
sodium alkylbenzenesulphonate	2-1000		Method not given	High potential for bioaccumulation	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
sodium hydroxide	No data available				Mobile in soil
disodium metasilicate	No data available				
sodium alkylbenzenesulphonate	No data available				

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

Suma Frit D9.1

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.

SECTION 14: Transport information**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

14.1 UN number: 1823

14.2 UN proper shipping name:

Sodium hydroxide, solid, mixture

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: C6

Tunnel restriction code: E

Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

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

Ingredients according to Detergents Regulation

phosphates

5 - 15 %

anionic surfactants

< 5 %

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Suma Frit D9.1

Comah - classification: Not classified

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: MSDS3353

Version: 09.0

Revision: 2022-03-20

Reason for revision:

This data sheet contains changes from the previous version in section(s): 1, 2, 3, 4, 6, 8, 15, 16, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006

Classification procedure

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

Full text of the H and EUH phrases mentioned in section 3:

- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H412 - Harmful to aquatic life with long lasting effects.

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 - Organisation 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