

Bryta Professional Dishwasher Powder

Revision: 2024-08-01

Version: 03.1

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

1.1 Product identifier

Trade name: Bryta Professional Dishwasher Powder

UFI: SNS1-R0U9-200K-AM2K

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_8b_1
AISE_SWED_PW_4_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssebroeksedijk 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@solenis.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 irritation, Category 2 (H315)
Serious eye damage, Category 1 (H318)
Chronic aquatic toxicity, Category 3 (H412)

2.2 Label elements



Signal word: Danger.

Contains disodium metasilicate pentahydrate (Sodium Metasilicate).

Hazard statements:

H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.
EUH031 - Contact with acids liberates toxic gas.

Precautionary statements:

P280 - Wear eye or face protection.
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.

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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	01-211948549 8-19	Eye irritation, Category 2 (H319)		10-20
disodium metasilicate	229-912-9	6834-92-0	01-211944981 1-37	Skin corrosion, Category 1B (H314) Specific target organ toxicity - Single exposure, Category 3 (H335) Serious eye damage, Category 1 (H318) Corrosive to metals, Category 1 (H290)		10-20
sodium dichloroisocyanurate, dihydrate	220-767-7	-	[6]	EUH031 Acute toxicity - Oral, Category 4 (H302) Specific target organ toxicity - Single exposure, Category 3 (H335) Eye irritation, Category 2 (H319) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		1-3
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	[4]	120313-48-6	[4]	Skin irritation, Category 2 (H315) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 3 (H412)		0.1-1

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

ATE, if available, are listed in section 11.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

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

SECTION 4: First aid measures**4.1 Description of first aid measures****Inhalation:**

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

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. 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 irritation.

Eye contact:

Causes severe or permanent damage.

Ingestion:

No known effects or symptoms in normal use.

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**

Wear eye/face protection. Repeated or prolonged contact: Wear suitable gloves.

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6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

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 contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. 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:

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	-	-	-	-
disodium metasilicate	-	-	-	0.74
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
sodium carbonate	-	-	No data available	-
disodium metasilicate	No data available	-	No data available	1.49
sodium dichloroisocyanurate, dihydrate	-	-	-	2.3
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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	-
disodium metasilicate	No data available	-	No data available	0.74
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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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	-
disodium metasilicate	-	-	-	6.22
sodium dichloroisocyanurate, dihydrate	-	-	-	8.11
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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	-	-	-
disodium metasilicate	-	-	-	1.55
sodium dichloroisocyanurate, dihydrate	-	-	-	1.99
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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	-	-	-	-
disodium metasilicate	7.5	1	7.5	1000
sodium dichloroisocyanurate, dihydrate	0.00017	1.52	0.0017	0.59
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
sodium carbonate	-	-	-	-
disodium metasilicate	-	-	-	-
sodium dichloroisocyanurate, dihydrate	7.56	-	0.756	-
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available	No data available	No data available	No data available

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: 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
Automatic transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

Personal protective equipment**Eye / face protection:**

Safety glasses or goggles (EN 16321 / EN 166).

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.

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Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.5

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:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	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: 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	
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
disodium metasilicate	No data available		
sodium dichloroisocyanurate, dihydrate	Product decomposes before boiling	Read across	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	> 250	Method not given	

	Method / remark
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	

Substance data, flammability or explosive limits, if available:

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: Not applicable	
Dilution pH: > 11 (0.5 %)	ISO 4316
Kinematic viscosity: Not determined	Not applicable to solids or gases
Solubility in / Miscibility with water: Soluble	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium carbonate	210-215	Method not given	20
disodium metasilicate	350	Method not given	20
sodium dichloroisocyanurate, dihydrate	248.2	Read across	25
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Insoluble		

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

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Vapour pressure: Not determined

Method / remark
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium carbonate	Negligible		
disodium metasilicate	No data available		
sodium dichloroisocyanurate, dihydrate	0.006	Read across	20
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	< 10	Method not given	20

Relative density: ≈ 1.12 (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. Reacts with acids releasing toxic chlorine gas.

10.6 Hazardous decomposition products

Chlorine.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

Skin irritation and corrosivity

Result: Skin irritant 2 Method: Weight of evidence

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 Oral (mg/kg)
sodium carbonate	LD ₅₀	2800	Rat	OECD 401 (EU B.1)		2800
disodium metasilicate	LD ₅₀	770 - 820	Mouse	Method not given	ECHA Dossier 2020	Not established
sodium dichloroisocyanurate, dihydrate	LD ₅₀	1671	Rat	EPA OPP 81-1		1671
Alcohols, C12-15-branched and linear, ethoxylated	LD ₅₀	> 2000	Rat	Method not given		1.2e+006

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propoxylated						
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Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
sodium carbonate	LD ₅₀	> 2000	Rabbit	Method not given		Not established
disodium metasilicate	LD ₅₀	> 5000	Rat Guinea pig	Method not given		Not established
sodium dichloroisocyanurate, dihydrate	LD ₅₀	> 5000	Rat	EPA OPP 81-2		Not established
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available				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
disodium metasilicate	LC ₅₀	> 2.06	Rat	Method not given	
sodium dichloroisocyanurate, dihydrate	LC ₅₀	> 0.27	Rat	OECD 403 (EU B.2)	4
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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
disodium metasilicate	Not established	Not established	Not established	Not established
sodium dichloroisocyanurate, dihydrate	Not established	Not established	Not established	Not established
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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)	
disodium metasilicate	Corrosive		Method not given	
sodium dichloroisocyanurate, dihydrate	Not irritant		Method not given	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Irritant	Rabbit	Draize test	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	OECD 405 (EU B.5)	
disodium metasilicate	Corrosive		Method not given	
sodium dichloroisocyanurate, dihydrate	Irritant		Method not given	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Not corrosive or irritant	Rabbit	Draize test	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium metasilicate	Irritating to respiratory tract		Method not given	
sodium dichloroisocyanurate, dihydrate	Irritating to respiratory tract			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
disodium metasilicate	Not sensitising	Mouse	OECD 429 (EU B.42)	
sodium dichloroisocyanurate, dihydrate	Not sensitising	Guinea pig	OECD 429 (EU B.42)	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium metasilicate	No data available			
sodium dichloroisocyanurate, dihydrate	No data available			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

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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	
disodium metasilicate	No data available		No data available	
sodium dichloroisocyanurate, dihydrate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 475 (EU B.11)
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
disodium metasilicate	No data available
sodium dichloroisocyanurate, dihydrate	No evidence for carcinogenicity, negative test results
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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				
disodium metasilicate			No data available				
sodium dichloroisocyanurate, dihydrate	NOAEL	Developmental toxicity	190	Rat	OECD 416, (EU B.35), oral		No known significant effects or critical hazards
Alcohols, C12-15-branched and linear, ethoxylated propoxylated			No data available				

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				
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given		
sodium dichloroisocyanurate, dihydrate	NOAEL	115	Rat	Method not given	28	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data 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				
disodium metasilicate		No data available				
sodium dichloroisocyanurate, dihydrate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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				
disodium metasilicate		No data available				
sodium dichloroisocyanurate, dihydrate	NOAEL	> 31	Rat	Method not given	28	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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					

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			available					
disodium metasilicate			No data available					
sodium dichloroisocyanurate, dihydrate	Oral	NOAEL	1523	Mouse	OECD 453 (EU B.33)	24 month(s)		
Alcohols, C12-15-branched and linear, ethoxylated propoxylated			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium metasilicate	Respiratory tract
sodium dichloroisocyanurate, dihydrate	Respiratory tract
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	Not applicable
disodium metasilicate	Not applicable
sodium dichloroisocyanurate, dihydrate	Not applicable
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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
disodium metasilicate	LC ₅₀	210	<i>Brachydanio rerio</i>	Method not given	96
sodium dichloroisocyanurate, dihydrate	LC ₅₀	0.23	<i>Lepomis macrochirus</i>	Method not given	96
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	LC ₅₀	> 1-10	<i>Fish</i>	OECD 203 (EU C.1)	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
disodium metasilicate	EC ₅₀	1700	<i>Daphnia</i>	Method not given	48
sodium dichloroisocyanurate, dihydrate	EC ₅₀	0.21	<i>Daphnia magna Straus</i>	ASTM draft method	48
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	EC ₅₀	≤ 1	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
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sodium carbonate	EC ₅₀	> 800	<i>Selenastrum capricornutum</i>		72
disodium metasilicate	EC ₅₀	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
sodium dichloroisocyanurate, dihydrate	EC ₅₀	< 0.5	<i>Scenedesmus obliquus</i>	Non guideline test	3
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	EC ₅₀	≤ 1	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	RM000517/ RM002677 BASF EU RSDS 2021

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			
disodium metasilicate		No data available			
sodium dichloroisocyanurate, dihydrate		No data available			
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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			
disodium metasilicate	EC ₅₀	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
sodium dichloroisocyanurate, dihydrate	EC ₅₀	51		OECD 209	3 hour(s)
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available			

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				
disodium metasilicate		No data available				
sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Oncorhynchus mykiss</i>	OECD 215	28 day(s)	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
disodium metasilicate		No data available				
sodium dichloroisocyanurate, dihydrate	NOEC	160	<i>Daphnia magna</i>	OECD 211	21 day(s)	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	NOEC	> 0.1-1	<i>Daphnia magna</i>	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
sodium carbonate		No data available				
disodium metasilicate		No data available				
sodium dichloroisocyanurate, dihydrate		No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated		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
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sodium carbonate		No data available				
sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Eisenia fetida</i>	OECD 207	14	

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 dichloroisocyanurate, dihydrate		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 dichloroisocyanurate, dihydrate		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 dichloroisocyanurate, dihydrate		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 dichloroisocyanurate, dihydrate		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 dichloroisocyanurate, dihydrate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	
sodium dichloroisocyanurate, dihydrate	No data available			

Abiotic degradation - other processes, if available:

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

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
disodium metasilicate					Not applicable (inorganic substance)
sodium dichloroisocyanurate, dihydrate		Oxygen depletion	2 % in 28d day(s)	OECD 301D	Not readily biodegradable.
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Activated sludge, aerobe	CO ₂ production	> 60% in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical	DT ₅₀	Method	Evaluation
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	method			
sodium carbonate				No data available
sodium dichloroisocyanurate, dihydrate				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 dichloroisocyanurate, dihydrate					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	
disodium metasilicate	No data available			
sodium dichloroisocyanurate, dihydrate	-0.0056	Method not given	No bioaccumulation expected	
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
disodium metasilicate	No data available				
sodium dichloroisocyanurate, dihydrate	No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	No data available				

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
disodium metasilicate	No data available				
sodium dichloroisocyanurate, dihydrate	No data available				
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	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:

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 or ID number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

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14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

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	>= 30 %
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) 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.

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: MS1001924

Version: 03.1

Revision: 2024-08-01

Reason for revision:

Name change, 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):, 2, 4, 6, 7, 8, 9, 10, 11, 12, 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.

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
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.

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- 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.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- EUH031 - Contact with acids liberates toxic gas.

End of Safety Data Sheet