



## Bryta Professional Dishwasher Powder

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

#### 1.1 Product identifier

**Trade name:** Bryta Professional Dishwasher Powder

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

##### Identified uses:

For professional use only.

AISE-P201 - Dishwash product. Manual process

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

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

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

#### Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.com

#### 1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

EUH031

Skin Irrit. 2 (H315)

Eye Dam. 1 (H318)

Aquatic Chronic 3 (H412)

#### 2.2 Label elements



**Signal word:** Danger.

Contains disodium metasilicate pentahydrate (Sodium Metasilicate).

#### Hazard statements:

EUH031 - Contact with acids liberates toxic gas.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

#### 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.

#### 2.3 Other hazards

No other hazards known

The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII

### SECTION 3: Composition/information on ingredients

## Bryta Professional Dishwasher Powder

## 3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
disodium metasilicate pentahydrate	229-912-9	10213-79-3	01-2119449811-37	Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290)		10-20
sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		10-20
sodium dichloroisocyanurate, dihydrate	220-767-7	51580-86-0	01-2119489371-33	EUH031 Acute Tox. 4 (H302) STOT SE 3 (H335) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		1-3
alkyl alcohol alkoxyate	Polymer*	120313-48-6	[4]	Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		0.1-1

\* Polymer.

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

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

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

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

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

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

## 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. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

#### Eye contact:

Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

#### Ingestion:

Rinse mouth. Immediately drink 1 glass of water. 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.

### 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.

### 6.4 Reference to other sections

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

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

### 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 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 metasilicate pentahydrate	-	-	-	0.74
sodium carbonate	-	-	-	-
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available

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 metasilicate pentahydrate	-	-	-	1.49
sodium carbonate	No data available	-	No data available	-
sodium dichloroisocyanurate, dihydrate	-	-	-	2.3
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available

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 metasilicate pentahydrate	-	-	-	0.74
sodium carbonate	No data available	-	No data available	-
sodium dichloroisocyanurate, dihydrate	-	-	-	1.15
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
disodium metasilicate pentahydrate	-	-	-	6.22
sodium carbonate	-	-	10	-
sodium dichloroisocyanurate, dihydrate	-	-	-	8.11
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

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

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	effects	effects	effects	effects
disodium metasilicate pentahydrate	-	-	-	1.55
sodium carbonate	10	-	-	-
sodium dichloroisocyanurate, dihydrate	-	-	-	1.99
alkyl alcohol alkoxylate	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)
disodium metasilicate pentahydrate	7.5	1	7.5	1000
sodium carbonate	-	-	-	-
sodium dichloroisocyanurate, dihydrate	0.00017	1.52	0.0017	0.59
alkyl alcohol alkoxylate	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 <sup>3</sup> )
disodium metasilicate pentahydrate	No data available	No data available	No data available	-
sodium carbonate	-	-	-	-
sodium dichloroisocyanurate, dihydrate	7.56	-	0.756	-
alkyl alcohol alkoxylate	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:

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

**Appropriate engineering controls:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

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

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

Safety glasses or goggles (EN 166).

**Hand protection:**

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.  
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**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.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (%):** 0.5

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

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

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

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

**Hand protection:**

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

**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

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**Physical State:** Solid**Colour:** White**Odour:** Product specific**Odour threshold:** Not applicable**pH:****Dilution pH:** > 12 (1%)**Melting point/freezing point (°C):** Not determined**Initial boiling point and boiling range (°C):** Not determined**Method / remark**

Not relevant to classification of this product

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
disodium metasilicate pentahydrate	Not applicable to solids or gases		
sodium carbonate	1600	Method not given	1013
sodium dichloroisocyanurate, dihydrate	Product decomposes before boiling	Read across	
alkyl alcohol alkoxyate	> 250	Method not given	

**Method / remark****Flash point (°C):** Not applicable.**Sustained combustion:** Not applicable.*( UN Manual of Tests and Criteria, section 32, L.2 )***Evaporation rate:** Not determined**Flammability (solid, gas):** Not determined**Upper/lower flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark****Vapour pressure:** Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
disodium metasilicate pentahydrate	Not applicable		
sodium carbonate	Negligible		
sodium dichloroisocyanurate, dihydrate	0.006	Read across	20
alkyl alcohol alkoxyate	< 10	Method not given	20

**Method / remark****Vapour density:** Not determined**Relative density:** ≈ 1.12 (20 °C)**Solubility in / Miscibility with Water:** Soluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
disodium metasilicate pentahydrate	Soluble		
sodium carbonate	210-215	Method not given	20
sodium dichloroisocyanurate, dihydrate	248.2	Read across	25
alkyl alcohol alkoxyate	Insoluble	Method not given	

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

**Method / remark****Autoignition temperature:** Not determined**Decomposition temperature:** Not applicable.**Viscosity:** Not determined**Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**9.2 Other information****Surface tension (N/m):** Not determined**Corrosion to metals:** Not determined

Not relevant to classification of this product

Not applicable to solids or gases

Substance data, dissociation constant, if available:

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

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**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**

Contact with acids liberates toxic gas. Reacts with acids. Keep away from 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): >5000

**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)
disodium metasilicate pentahydrate	LD <sub>50</sub>	1152 - 1349	Rat	Method not given	
sodium carbonate	LD <sub>50</sub>	2800	Rat	Method not given	
sodium dichloroisocyanurate, dihydrate	LD <sub>50</sub>	1671	Rat	EPA OPP 81-1	
alkyl alcohol alkoxylate	LD <sub>50</sub>	> 2000	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	LD <sub>50</sub>	> 5000	Rat	Method not given	
sodium carbonate	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
sodium dichloroisocyanurate, dihydrate	LD <sub>50</sub>	> 5000	Rat	EPA OPP 81-2	
alkyl alcohol alkoxylate		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	LC <sub>50</sub>	> 2.06 (mist)	Rat	Method not given	4
sodium carbonate	LC <sub>50</sub>	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
sodium dichloroisocyanurate, dihydrate	LC <sub>50</sub>	> 0.27	Rat	OECD 403 (EU B.2)	4
alkyl alcohol alkoxylate		No data available			

**Irritation and corrosivity**

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate pentahydrate	Corrosive	Rabbit	OECD 404 (EU B.4)	
sodium carbonate	Not irritant	Rabbit	Method not given	
sodium dichloroisocyanurate, dihydrate	Corrosive	Rabbit	EPA OPP 81-5	
alkyl alcohol alkoxylate	Irritant	Rabbit	Draize test	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate pentahydrate	Corrosive	Rabbit	Method not given	
sodium carbonate	Irritant	Rabbit	Method not given	
sodium dichloroisocyanurate, dihydrate	Corrosive	Rabbit	EPA OPP 81-4	
alkyl alcohol alkoxylate	Not corrosive or irritant	Rabbit	Method not given	

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## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate pentahydrate	No data available			
sodium carbonate	No data available			
sodium dichloroisocyanurate, dihydrate	Irritating to respiratory tract			
alkyl alcohol alkoxylate	No data available			

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	Not sensitising		Method not given	
sodium carbonate	Not sensitising		Method not given	
sodium dichloroisocyanurate, dihydrate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl alcohol alkoxylate	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
disodium metasilicate pentahydrate	No data available			
sodium carbonate	No data available			
sodium dichloroisocyanurate, dihydrate	No data available			
alkyl alcohol alkoxylate	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 metasilicate pentahydrate	No evidence of genotoxicity, negative test results		No evidence of genotoxicity, negative test results	
sodium carbonate	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)
alkyl alcohol alkoxylate	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
disodium metasilicate pentahydrate	No data available
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium dichloroisocyanurate, dihydrate	No evidence for carcinogenicity, negative test results
alkyl alcohol alkoxylate	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
disodium metasilicate pentahydrate			No data available				No evidence for reproductive toxicity No evidence for developmental toxicity
sodium carbonate			No data available				
sodium dichloroisocyanurate, dihydrate	NOAEL	Developmental toxicity	190	Rat	OECD 416, (EU B.35), oral		
alkyl alcohol alkoxylate			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
disodium metasilicate pentahydrate		No data available				
sodium carbonate		No data available				
sodium dichloroisocyanurate, dihydrate	NOAEL	115	Rat	Method not given	28	
alkyl alcohol alkoxylate		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
disodium metasilicate pentahydrate		No data available				
sodium carbonate		No data				

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		available				
sodium dichloroisocyanurate, dihydrate		No data available				
alkyl alcohol alkoxylate		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 metasilicate pentahydrate		No data available				
sodium carbonate		No data available				
sodium dichloroisocyanurate, dihydrate	NOAEL	> 31	Rat	Method not given	28	
alkyl alcohol alkoxylate		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 metasilicate pentahydrate		NOAEL	227	Rat	Method not given			
sodium carbonate			No data available					
sodium dichloroisocyanurate, dihydrate	Oral	NOAEL	1523	Mouse	OECD 453 (EU B.33)	24 month(s)		
alkyl alcohol alkoxylate			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
disodium metasilicate pentahydrate	Respiratory tract
sodium carbonate	No data available
sodium dichloroisocyanurate, dihydrate	No data available
alkyl alcohol alkoxylate	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
disodium metasilicate pentahydrate	No data available
sodium carbonate	No data available
sodium dichloroisocyanurate, dihydrate	No data available
alkyl alcohol alkoxylate	No data available

## Aspiration hazard

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

## Potential adverse health effects and symptoms

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

## SECTION 12: Ecological information

## 12.1 Toxicity

No data is available on the mixture.

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

## Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	LC <sub>50</sub>	210	<i>Brachydanio rerio</i>	Method not given	96
sodium carbonate	LC <sub>50</sub>	300	<i>Lepomis macrochirus</i>	Method not given	96
sodium dichloroisocyanurate, dihydrate	LC <sub>50</sub>	0.23	<i>Lepomis macrochirus</i>	Method not given	96
alkyl alcohol alkoxylate	LC <sub>50</sub>	1 - 10	<i>Leuciscus idus</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	EC <sub>50</sub>	216	<i>Daphnia magna Straus</i>	Method not given	96



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sodium carbonate	EC <sub>50</sub>	265	<i>Daphnia magna Straus</i>	Method not given	96
sodium dichloroisocyanurate, dihydrate	EC <sub>50</sub>	0.17	<i>Daphnia magna Straus</i>	ASTM draft method	48
alkyl alcohol alkoxylate	EC <sub>50</sub>	1	<i>Not specified</i>	Method not given	48

## Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
disodium metasilicate pentahydrate	EC <sub>50</sub>	207	<i>Desmodesmus subspicatus</i>	Method not given	72
sodium carbonate		No data available			-
sodium dichloroisocyanurate, dihydrate	EC <sub>50</sub>	< 0.5	<i>Scenedesmus obliquus</i>	Non guideline test	3
alkyl alcohol alkoxylate	EC <sub>50</sub>	0.1 - 1	<i>Not specified</i>	Method not given	72

## Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
disodium metasilicate pentahydrate		No data available			-
sodium carbonate		No data available			-
sodium dichloroisocyanurate, dihydrate		No data available			-
alkyl alcohol alkoxylate		No data available			-

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
disodium metasilicate pentahydrate	EC <sub>0</sub>	> 1000	<i>Pseudomonas putida</i>	Method not given	0.5 hour(s)
sodium carbonate		No data available			
sodium dichloroisocyanurate, dihydrate		No data available			
alkyl alcohol alkoxylate		1000	<i>Activated sludge</i>	DIN EN ISO 8192-OECD 209-88/302/EEC	

## Aquatic long-term toxicity

## Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium metasilicate pentahydrate		No data available				
sodium carbonate		No data available				
sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Oncorhynchus mykiss</i>	OECD 215	28 day(s)	
alkyl alcohol alkoxylate		No data available				

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
disodium metasilicate pentahydrate		No data available				
sodium carbonate		No data available				
sodium dichloroisocyanurate, dihydrate	NOEC	160	<i>Daphnia magna</i>	OECD 211	21 day(s)	
alkyl alcohol alkoxylate	NOEC	0.25	<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
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

## Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate	NOEC	1000	<i>Eisenia fetida</i>	OECD 207	14	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate pentahydrate		No data available			-	
sodium carbonate		No data available			-	
sodium dichloroisocyanurate, dihydrate		No data available			-	
alkyl alcohol alkoxylate		No data available			-	

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
disodium metasilicate pentahydrate					Not applicable (inorganic substance)

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sodium carbonate					Not applicable (inorganic substance)
sodium dichloroisocyanurate, dihydrate		Oxygen depletion	2 % in 28d day(s)	OECD 301D	Not readily biodegradable.
alkyl alcohol alkoxylate		CO <sub>2</sub> production	> 60% in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

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 metasilicate pentahydrate	No data available		No bioaccumulation expected	
sodium carbonate	No data available		No bioaccumulation expected	
sodium dichloroisocyanurate, dihydrate	-0.0056	Method not given	No bioaccumulation expected	
alkyl alcohol alkoxylate	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
disodium metasilicate pentahydrate	No data available				
sodium carbonate	No data available			No bioaccumulation expected	
sodium dichloroisocyanurate, dihydrate	No data available				
alkyl alcohol alkoxylate	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 metasilicate pentahydrate	No data available				Potential for mobility in soil, soluble in water
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
sodium dichloroisocyanurate, dihydrate	No data available				
alkyl alcohol alkoxylate	No data available				Potential for adsorption to soil

### 12.5 Results of PBT and vPvB assessment

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

### 12.6 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

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: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

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

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 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations:

**Bryta Professional Dishwasher Powder**

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

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

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

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) 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.

**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:** 03.0

**Revision:** 2018-03-04

**Reason for revision:**

Name change

**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.
- 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.
- H411 - Toxic to aquatic life with long lasting effects.
- EUH031 - Contact with acids liberates toxic gas.

**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

**End of Safety Data Sheet**