



## Safety Data Sheet

According to Regulation (EC) No 1907/2006

### Bryta Dishwashing Powder

Revision: 2014-02-06

Version: 01

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

##### 1.1 Product identifier

**Trade name:** Bryta Dishwashing 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 Ltd

##### Contact details

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@sealedair.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

The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

##### Indication of danger

C - Corrosive

##### Risk phrases:

R31 - Contact with acids liberates toxic gas.

R34 - Causes burns.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### 2.2 Label elements



C - Corrosive

Contains disodium metasilicate pentahydrate

##### Risk phrases:

R31 - Contact with acids liberates toxic gas.

R34 - Causes burns.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### Safety phrases:

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28a - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61b - Avoid release to the environment. Refer to safety data sheet.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

##### 2.3 Other hazards

## Bryta Dishwashing Powder

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

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (EC) 1272/2008	Notes	Weight percent
disodium metasilicate pentahydrate	600-279-4	10213-79-3	01-2119449811-37	C;R34 Xi;R37	Skin Corr. 1B (H314) Met. Corr. 1 (H290) STOT SE 3 (H335)		10-20
sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Xi;R36	Eye Irrit. 2 (H319)		10-20
sodium dichloroisocyanurate, dihydrate	220-767-7	51580-86-0	01-2119489371-33	Xn;R22 R31 Xi;R36/37 N;R50/53	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Acute Tox. 4 (H302) (EUH031) Eye Irrit. 2 (H319) STOT SE 3 (H335)		1-3
alkyl alcohol alkoxylate	Polymer*	111905-54-5	[4]	Xi;R38 N;R50	Aquatic Acute 1 (H400) Skin Irrit. 2 (H315)		0.1-1

\* Polymer.

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

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

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

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

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

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

**SECTION 4: First aid measures****4.1 Description of first aid measures****General Information:**

If unconscious place in recovery position and seek medical advice.

**Inhalation**

Remove from source of exposure. Get medical attention immediately.

**Skin contact:**

Rinse with plenty of water. Take off all contaminated clothing immediately. Get medical attention.

**Eye contact:**

Wash off immediately with plenty of water. Get medical attention immediately.

**Ingestion:**

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention immediately.

**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:**

Severe irritant, may cause respiratory tract irritation.

**Skin contact:**

Causes burns.

**Eye contact:**

Causes severe or permanent damage.

**Ingestion:**

Causes burns. Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

**Sensitisation:**

No known effects.

**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 suitable protective clothing, gloves and eye/face protection.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. 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**

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Collect mechanically.

#### 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

#### Advice on safe handling:

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

#### Prevention of fire and explosion:

No special precautions required.

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

#### Requirements for storage rooms / facilities:

In accordance with local and national regulations.

#### Combined storage in storage rooms / facilities:

In accordance with local and national regulations. Store away from acids.

#### Basic storage conditions

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

### 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	No data available	No data available	No data available	0.74
sodium carbonate	No data available	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	No data available	No data available	No data available	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	No data available	No data available	No data available	1.49
sodium carbonate	No data available	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	No data available	No data available	No data available	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	No data available	No data available	No data available	0.74
sodium carbonate	No data available	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	No data available	No data available	No data available	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	No data available	No data available	No data available	6.22
sodium carbonate	No data available	No data available	10	No data available
sodium dichloroisocyanurate, dihydrate	No data available	No data available	No data available	8.11
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available

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DNEL inhalatory exposure - Consumer (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	No data available	No data available	No data available	1.55
sodium carbonate	10	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	No data available	No data available	No data available	1.99
alkyl alcohol alkoxyate	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	No data available	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	0.00017	1.52	0.0017	0.59
alkyl alcohol alkoxyate	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	No data available
sodium carbonate	No data available	No data available	No data available	No data available
sodium dichloroisocyanurate, dihydrate	7.56	No data available	0.756	No data available
alkyl alcohol alkoxyate	No data available	No data available	No data available	No data available

**8.2 Exposure controls****General health and safety measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes.

The following information applies for the uses indicated in subsection 1.2.

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:** Use only in well ventilated areas. 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:  $\geq$  480 min

Material thickness:  $\geq$  0.7 mm

Suggested gloves for protection against splashes:

Material: nitrile rubber

Penetration time:  $\geq$  30 min

Material thickness:  $\geq$  0.4 mm

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

**Body protection:** Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.

**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted.

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**

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**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.  
**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

**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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
disodium metasilicate pentahydrate	No data available		
sodium carbonate	1600	Method not given	1013
sodium dichloroisocyanurate, dihydrate	Product decomposes before boiling	Read across	
alkyl alcohol alkoxylate	> 250	Method not given	

Method / remark

**Flash point (°C):** Not applicable.  
**Sustained combustion:** Not determined  
**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	No data available		
sodium carbonate	Negligible		
sodium dichloroisocyanurate, dihydrate	0.006	Read across	20
alkyl alcohol alkoxylate	< 10	Method not given	20

Method / remark

**Vapour density:** Not determined  
**Relative density:** 1.15  
**Solubility in / Miscibility with Water:** Soluble

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
disodium metasilicate pentahydrate	175	Method not given	20
sodium carbonate	210-215	Method not given	20
sodium dichloroisocyanurate, dihydrate	248.2	Read across	25
alkyl alcohol alkoxylate	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 determined  
**Viscosity:** Not determined  
**Explosive properties:** Not explosive.  
**Oxidising properties:** Not oxidising.

### 9.2 Other information

## Bryta Dishwashing Powder

**Surface tension (N/m):** Not determined

**Corrosion to metals**

**(according to IMDG/ADR regulation):** Not determined

Substance data, dissociation constant, if 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

Contact with acids liberates toxic gas. 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

#### Mixtures

No test data is available on the mixture

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	Mouse	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	

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sodium dichloroisocyanurate, dihydrate	Corrosive	Rabbit	EPA OPP 81-4	
alkyl alcohol alkoxylate	Not corrosive or irritant	Rabbit	Method not given	

## 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			

## 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 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			No data available					
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					

## Bryta Dishwashing Powder

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available:

## Carcinogenicity

<b>Ingredient(s)</b>	<b>Effect</b>
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

## Mutagenicity

<b>Ingredient(s)</b>	<b>Result (in-vitro)</b>	<b>Method (in-vitro)</b>	<b>Result (in-vivo)</b>	<b>Method (in-vivo)</b>
disodium metasilicate pentahydrate	No data available		No data available	
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	

## Toxicity for reproduction

<b>Ingredient(s)</b>	<b>Endpoint</b>	<b>Specific effect</b>	<b>Value (mg/kg bw/d)</b>	<b>Species</b>	<b>Method</b>	<b>Exposure time</b>	<b>Remarks and other effects reported</b>
disodium metasilicate pentahydrate			No data available				
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				

**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**

Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

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

Aquatic short-term toxicity - crustacea

<b>Ingredient(s)</b>	<b>Endpoint</b>	<b>Value (mg/l)</b>	<b>Species</b>	<b>Method</b>	<b>Exposure time (h)</b>
disodium metasilicate pentahydrate	EC <sub>50</sub>	216	Daphnia magna Straus	Method not given	96
sodium carbonate	EC <sub>50</sub>	265	Daphnia magna Straus	Method not given	96
sodium dichloroisocyanurate, dihydrate	EC <sub>50</sub>	0.17	Daphnia magna Straus	ASTM draft method	48
alkyl alcohol alkoxylate	EC <sub>50</sub>	1	Not specified	Method not given	48

Aquatic short-term toxicity - algae

<b>Ingredient(s)</b>	<b>Endpoint</b>	<b>Value (mg/l)</b>	<b>Species</b>	<b>Method</b>	<b>Exposure time (h)</b>
disodium metasilicate pentahydrate	EC <sub>50</sub>	207	Desmodesmus subspicatus	Method not given	72
sodium carbonate		No data available			



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sodium dichloroisocyanurate, dihydrate	EC <sub>50</sub>	< 0.5	Scenedesmus obliquus	Non guideline test	3
alkyl alcohol alkoxylate	EC <sub>50</sub>	0.1 - 1	Not specified	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	Pseudomonas putida	Method not given	0.5 hour(s)
sodium carbonate		No data available			
sodium dichloroisocyanurate, dihydrate		No data available			
alkyl alcohol alkoxylate		1000	Activated sludge	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	Oncorhynchus mykiss	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	Daphnia magna	OECD 211	21 day(s)	
alkyl alcohol alkoxylate	NOEC	0.25	Daphnia magna	Method not given	21 day(s)	

## Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

## Bryta Dishwashing Powder

## 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)
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 K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (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:

European Waste Catalogue:

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.

20 01 15\* - alkalines.

Empty packaging  
Recommendation:

Dispose of observing national or local regulations.

**SECTION 14: Transport information****ADR, RID, ADN, IMO/IMDG, ICAO/IATA****14.1 UN number:** 3253**14.2 UN proper shipping name:**

Disodium trioxosilicate

**14.3 Transport hazard class(es):****Class:** 8**Label(s):** 8**14.4 Packing group:** III**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 73/78 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****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

&lt; 5%

**15.2 Chemical safety assessment**

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

**SECTION 16: Other information**

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

**MSDS code:** MS1001047**Version:** 01**Revision:** 2014-02-06**Reason for revision:**

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

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

- R34 - Causes burns.
- R37 - Irritating to respiratory system.
- R36 - Irritating to eyes.
- R31 - Contact with acids liberates toxic gas.
- R22 - Harmful if swallowed.
- R50 - Very toxic to aquatic organisms.
- R38 - Irritating to skin.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R36/37 - Irritating to eyes and respiratory system.
- R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- EUH031 - Contact with acids liberates toxic gas.
- 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.

**Bryta Dishwashing Powder****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

**End of Safety Data Sheet**