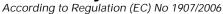
## Safety Data Sheet





## **Bryta 5in1 Dishwasher Tabs**

**Revision:** 2018-01-25 **Version:** 02.1

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

#### 1.1 Product identifier

Trade name: Bryta 5in1 Dishwasher Tabs

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

Identified uses:

For professional use only.

AISE-P202 - Dishwash product. Automatic 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

Eye Irrit. 2 (H319)

#### 2.2 Label elements



Signal word: Warning.

#### Hazard statements:

H319 - Causes serious eye irritation.

## 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

#### 3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
sodium carbonate	207-838-8	497-19-8	01-2119485498-19	Eye Irrit. 2 (H319)		30-50
disodium disilicate	237-623-4	13870-28-5	01-2119485031-47	Eye Dam. 1 (H318)		10-20
sodium percarbonate	239-707-6	15630-89-4	01-2119457268-30	Ox. Sol. 2 (H272) Acute Tox. 4 (H302) Eye Dam. 1 (H318)		10-20
alkyl alcohol alkoxylate	Polymer*	69227-21-0	[4]	Skin Irrit. 2 (H315) Aquatic Chronic 3 (H412)		3-10
zinc di(acetate) dihydrate	209-170-2	557-34-6	No data available	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)		0.1-1

		STOT SE 3 (H335) Skin Irrit. 2 (H315)	
		Eye Irrit. 2 (H319)	

<sup>\*</sup> Polymer.

For the full text of the 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

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: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell. Ingestion:

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

#### 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use. Skin contact: No known effects or symptoms in normal use. Eye contact: Causes severe irritation. 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

No special measures required.

#### 6.2 Environmental precautions

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

#### 6.3 Methods and material for containment and cleaning up

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

#### Measures to prevent fire and explosions:

No special precautions required.

#### Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

#### Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash 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. Use personal protective equipment as required. 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 container. 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 - Systemic	Long term - Local	Long term - Systemic
	effects	effects	effects	effects
sodium carbonate	-	-	-	-
disodium disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	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)
sodium carbonate	No data available	-	No data available	-
disodium disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	12.8 mg/cm <sup>2</sup> skin	-	12.8 mg/cm <sup>2</sup> skin	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	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)
sodium carbonate	No data available	-	No data available	-
disodium disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	6.4 mg/cm <sup>2</sup> skin	-	6.4 mg/cm <sup>2</sup> skin	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	No data available	No data available	No data available	No data available

DNEL 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 disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	-	-	5	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	No data available	No data available	No data available	No data available

DNEL 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 disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	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 disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	0.035	0.035	0.035	16.24

	alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
Ī	zinc di(acetate) dihydrate	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater	Sediment, marine	Soil (mg/kg)	Air (mg/m³)
	(mg/kg)	(mg/kg)		
sodium carbonate	-	-	-	-
disodium disilicate	No data available	No data available	No data available	No data available
sodium percarbonate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
zinc di(acetate) dihydrate	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: No special requirements under normal use conditions.

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

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 Appearance: Tablets

Colour: from White to Blue Red

Odour: Product specific
Odour threshold: Not applicable

рН:

**Dilution pH:** ≈ 11 (10%)

Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): Not determined

Not relevant to classification of this product

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium carbonate	1600	Method not given	1013
disodium disilicate	No data available		
sodium percarbonate	Product decomposes before boiling		
alkyl alcohol alkoxylate	No data available		
zinc di(acetate) dihydrate	No data available		

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

Lance Parattal	1/-1 -	NA . (L . L	T
Ingredient(s)	Value	l Method	Temperature
mgreaterit(3)	V aluc	I WICHIOU	i cilipci atai c

	(Pa)	(°C)
sodium carbonate	Negligible	
disodium disilicate	No data available	
sodium percarbonate	Negligible	
alkyl alcohol alkoxylate	No data available	
zinc di(acetate) dihydrate	No data available	

Method / remark

Vapour density: Not determined Relative density: Not determined

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 disilicate	No data available		
sodium percarbonate	140	Method not given	20
alkyl alcohol alkoxylate	No data available		
zinc di(acetate) dihydrate	No data available		

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 Not relevant to classification of this product

Corrosion to metals: Not determined 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.

#### 10.2 Chemical stability

Stable under normal storage and use conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

## 10.4 Conditions to avoid

None known under normal storage and use conditions.

### 10.5 Incompatible materials

Reacts with acids.

#### 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Mixture data:.

### Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ATE - Dermal (mg/kg): >2000 ATE - Inhalatory, mists (mg/l): >5

#### Eye irritation and corrosivity

Result: Eye 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)
sodium carbonate	LD 50	2800	Rat	Method not given	
disodium disilicate		No data available			
sodium percarbonate	LD 50	1034	Rat	Method not given	
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD 50	> 2000	Rabbit	Method not given	
disodium disilicate		No data available			
sodium percarbonate	LD 50	> 2000	Rabbit	OECD 402 (EU B.3)	
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC 50	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
disodium disilicate		No data available			
sodium percarbonate		No data available			
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		No data available			

# Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	Method not given	
disodium disilicate	No data available			
sodium percarbonate	Not irritant	Rabbit	Method not given	
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	Method not given	
disodium disilicate	No data available			
sodium percarbonate	Severe damage	Rabbit	EPA OPP 81-4	
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium disilicate	No data available			
sodium percarbonate	Irritating to respiratory tract	Mouse	Method not given	
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

## Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
disodium disilicate	No data available			
sodium percarbonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
disodium disilicate	No data available			
sodium percarbonate	No data available			
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
disodium disilicate	No data available		No data available	
sodium percarbonate	No data available		No data available	
alkyl alcohol alkoxylate	No data available		No data available	
zinc di(acetate) dihydrate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
disodium disilicate	No data available
sodium percarbonate	No data available
alkyl alcohol alkoxylate	No data available
zinc di(acetate) dihydrate	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 disilicate			No data				
			available				
sodium percarbonate			No data				
			available				
alkyl alcohol alkoxylate			No data				
			available				
zinc di(acetate)			No data				
dihydrate			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 disilicate		No data available				
sodium percarbonate		No data available				
alkyl alcohol alkoxylate		No data available				
zinc di(acetate) dihydrate		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
g. ca.c(c)		(mg/kg bw/d)	Ороспос		time (days)	
sodium carbonate		No data available				
disodium disilicate		No data available				
sodium percarbonate		No data available				
alkyl alcohol alkoxylate		No data available				
zinc di(acetate) dihydrate		No data				

Sub-chronic inhalation toxicity

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

sodium percarbonate	No data available	
alkyl alcohol alkoxylate	No data available	
zinc di(acetate) dihydrate	No data available	

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium carbonate			No data available					
disodium disilicate			No data available					
sodium percarbonate			No data available					
alkyl alcohol alkoxylate			No data available					
zinc di(acetate) dihydrate			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
disodium disilicate	No data available
sodium percarbonate	No data available
alkyl alcohol alkoxylate	No data available
zinc di(acetate) dihydrate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
disodium disilicate	No data available
sodium percarbonate	No data available
alkyl alcohol alkoxylate	No data available
zinc di(acetate) dihydrate	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)
sodium carbonate	LC 50	300	Lepomis macrochirus	Method not given	96
disodium disilicate		No data available			
sodium percarbonate	LC 50	70.7	Pimephales promelas	Method not given	96
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC 50	265	Daphnia magna Straus	Method not given	96
disodium disilicate		No data available			
sodium percarbonate	EC 50	4.9	Daphnia pulex	Method not given	48
alkyl alcohol alkoxylate		No data available			

zinc di(acetate) dihydrate	No data available
A supplied to the set A supplied to the set of the set	

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate		No data available			-
disodium disilicate		No data available			
sodium percarbonate		No data available			-
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			-
disodium disilicate		No data available			
sodium percarbonate		No data available			-
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		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 disilicate		No data available			
sodium percarbonate	EC 50	466	Activated sludge	OECD 209	0.5 hour(s)
alkyl alcohol alkoxylate		No data available			
zinc di(acetate) dihydrate		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				
disodium disilicate		available No data				
sodium percarbonate	NOEC	available 7.4	Pimephales	Method not	96 hour(s)	
·	11020		promelas	given	oo noan(o)	
alkyl alcohol alkoxylate		No data available				
zinc di(acetate) dihydrate		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 disilicate		No data available				
sodium percarbonate	NOEC	2	Daphnia pulex	Method not given	48 hour(s)	
alkyl alcohol alkoxylate		No data available				
zinc di(acetate) dihydrate		No data available				

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		sediment)				
sodium carbonate		No data			-	
		available				
disodium disilicate		No data				

	available		
sodium percarbonate	No data	-	
	available		
alkyl alcohol alkoxylate	No data		
	available		
zinc di(acetate) dihydrate	No data		
	available		

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

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data			-	
		available				
sodium percarbonate		No data			-	
		available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium percarbonate		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 percarbonate		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 percarbonate		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 percarbonate		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 percarbonate	NA	Method not given		

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh	Method	Evaluation	Remark
	water			
sodium carbonate	No data available		Rapidly hydrolysible	
sodium percarbonate	< 1 day(s)	Method not given	Hydrolysible	

Abiotic degradation - other processes, if available:

**Biodegradation** Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
disodium disilicate					Not applicable (inorganic substance)
sodium percarbonate					Not applicable (inorganic substance)
alkyl alcohol alkoxylate					No data available
zinc di(acetate) dihydrate					No data available

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
sodium carbonate	No data available		No bioaccumulation expected	
disodium disilicate	No data available			
sodium percarbonate	No data available			
alkyl alcohol alkoxylate	No data available			
zinc di(acetate) dihydrate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
disodium disilicate	No data available				
sodium percarbonate	No data available				
alkyl alcohol alkoxylate	No data available				
zinc di(acetate) dihydrate	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
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
disodium disilicate	No data available				
sodium percarbonate	No data available				High potential for mobility in soil
alkyl alcohol alkoxylate	No data available				
zinc di(acetate) dihydrate	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 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 29\* - detergents containing dangerous substances.

**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

Class: -

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods14.6 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:

• 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% oxygen-based bleaching agents 5 - 15% non-ionic surfactants, polycarboxylates < 5% enzymes

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

Version: 02.1 Revision: 2018-01-25 **SDS code:** MS1000742

#### Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

#### Classification procedure

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

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

- H272 May intensify fire; oxidiser.
  H302 Harmful if swallowed.
- · H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- · H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.

### Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
   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**