

Safety Data Sheet According to Regulation (EC) No 1907/2006

Persil Professional Bio

Revision: 2015-10-18

Version: 02.0

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

1.1 Product identifier

Trade name: Persil Professional Bio Persil is a registered trade mark and is used under licence of Unilever

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

Identified uses: For professional use only. AISE-P102 - Laundry detergent. Semi-automatic process AISE-P103 - Laundry detergent. 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

Unilever UK Ltd., Freepost ADM1000, London SW1A 2XX Tel: 0800 776647

Diversey Ltd 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 Regulation (EC) No 1272/2008.

Eye Irrit. 2 (H319)

2.2 Label elements



Signal word: Warning.

Contains EUH208: 1,2-benzisothiazol-3(2H)-one (Benzisothiazolinone)

Hazard statements:

H319 - Causes serious eye irritation. EUH208 - May produce an allergic reaction.

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



Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
alkyl alcohol ethoxylate	500-195-7	68131-39-5	No data available	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	Xn;R22 Xi;R41 N;R50		3-10
sodium dodecylbenzenesulphonate	246-680-4	25155-30-0	01-2119489428-22	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Xn;R22 Xi;R38-41		3-10
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	221-416-0	3088-31-1	No data available	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	Xi;R38-41		1-3
1,2-benzisothiazol-3(2H)-one	220-120-9	2634-33-5	No data available	Acute Tox. 2 (H330) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	T;R23 Xn;R22 Xi;R38-41-43 N;R50		0.01-0.1

* 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 [1] Exempted: Included in Annex IV of Regulation (EC) No 1907/2006.
[2] Exempted: Included in Annex IV of Regulation (EC) No 1907/2006.
[3] Exempted: Polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

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

SECTION 4: First aid measures

4.1 Description of first aid measure	es
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.
Ingestion:	Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.
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:	No known offects or symptoms in normal use

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. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

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 Sealed Air. 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 - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	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)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	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)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	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
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m ³)				
Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic

	effects	effects	effects	effects
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	No data available	No data available	No data available	No data available

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	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/m ³)
	(mg/kg)	(mg/kg)		
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
sodium dodecylbenzenesulphonate	No data available	No data available	No data available	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	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 <u>undiluted</u> product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

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:	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.
Recommended safety measures for hand	dling the <u>diluted</u> product:

Recommended maximum concentration (%): 2

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

Physical State: Liquid Colour: Green Odour: Slightly perfumed Odour threshold: Not applicable pH: ≈ 8 (neat) 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 Method (°C)		Atmospheric pressure (hPa)
alkyl alcohol ethoxylate	No data available		
sodium dodecylbenzenesulphonate	No data available		
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not applicable. 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)
alkyl alcohol ethoxylate	No data available		
sodium dodecylbenzenesulphonate	No data available		
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		

Method / remark

Vapour density: Not determined Relative density: 1.02 g/cm³ (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyl alcohol ethoxylate	100	Method not given	
sodium dodecylbenzenesulphonate	No data available		
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		

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

Autoignition temperature: Not determined

Decomposition temperature: Not applicable. Viscosity: ≈ 450 mPa.s (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Not corrosive

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

None known under normal use conditions.

Method / remark

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

Skin irritation and corrosivity	
Result: Not corrosive or irritant	Method: Weight of evidence
Eye irritation and corrosivity	
Result: Eye irritant 2	Method: Weight of evidence

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

Acute toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD 50	> 300 - 2000		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD 50	> 2000		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
sodium dodecylbenzenesulphonate	No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
sodium dodecylbenzenesulphonate	No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			

Respiratory tract irritation and corrosivity				
Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			

sodium dodecylbenzenesulphonate	No data available	
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available	
1,2-benzisothiazol-3(2H)-one	No data available	

Sensitisation

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	No data available			
sodium dodecylbenzenesulphonate	No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
sodium dodecylbenzenesulphonate	No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
, , ,	No evidence for mutagenicity, negative test results		No data available	
sodium dodecylbenzenesulphonate	No data available		No data available	
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available		No data available	
1,2-benzisothiazol-3(2H)-one	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
sodium dodecylbenzenesulphonate	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available
1,2-benzisothiazol-3(2H)-one	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
alkyl alcohol ethoxylate			No data available				Not toxic for reproduction
sodium dodecylbenzenesulpho nate			No data available				
sodium 2-(2-dodecyloxyethoxy) ethyl sulphate			No data available				
1,2-benzisothiazol-3(2H)-one			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)	
alkyl alcohol ethoxylate		No data available				
sodium dodecylbenzenesulphonate		No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available				
1,2-benzisothiazol-3(2H)-one		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
alkyl alcohol ethoxylate		No data available				
sodium dodecylbenzenesulphonate		No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
sodium dodecylbenzenesulphonate		No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available				
1,2-benzisothiazol-3(2H)-one		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
alkyl alcohol ethoxylate			No data available					
sodium dodecylbenzenesulpho nate			No data available					
sodium 2-(2-dodecyloxyethoxy) ethyl sulphate			No data available					
1,2-benzisothiazol-3(2H)-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	No data available
sodium dodecylbenzenesulphonate	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available
1,2-benzisothiazol-3(2H)-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	No data available
sodium dodecylbenzenesulphonate	No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available
1,2-benzisothiazol-3(2H)-one	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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC 50	1 - 10		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC 50	1 - 10		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC 50	1 - 10		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Aquatic short-term toxicity - marine species					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC 50	> 100		Method not given	
sodium dodecylbenzenesulphonate		No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
sodium dodecylbenzenesulphonate		No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
sodium dodecylbenzenesulphonate		No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		sediment)				
alkyl alcohol ethoxylate		No data				
		available				
sodium dodecylbenzenesulphonate		No data				
		available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate		No data				
		available				
1,2-benzisothiazol-3(2H)-one		No data				
		available				

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
alkyl alcohol ethoxylate					Readily biodegradable
sodium dodecylbenzenesulphonate					No data available
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate					No data available
1,2-benzisothiazol-3(2H)-one					No data available

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)	
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Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	No data available			
sodium dodecylbenzenesulphonate	No data available			
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	No data available				
sodium dodecylbenzenesulpho nate	No data available				
sodium 2-(2-dodecyloxyethoxy) ethyl sulphate	No data available				
1,2-benzisothiazol-3(2H)-one	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
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water
sodium dodecylbenzenesulphonate	No data available				
sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	No data available				
1,2-benzisothiazol-3(2H)-one	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:

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 29* - detergents containing dangerous substances.

Empty packaging
Recommendation:
Suitable cleaning agents:

Dispose of observing national or local regulations. Water, if necessary with cleaning agent.

SECTION 14: Transport information

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

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 goods

14.6 Special precautions for user: Non-dangerous goods

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.

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

anionic surfactants, non-ionic surfactants soap perfumes, enzymes, optical brighteners, Benzisothiazolinone, Butylphenyl Methylpropional, Citronellol

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

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Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 15

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

- H302 Harmful if swallowed.
 H315 Causes skin irritation.
- H317 May cause an allergic skin reaction. • H318 - Causes serious eye damage.
- · H330 Fatal if inhaled.
- H400 Very toxic to aquatic life.
- · H411 Toxic to aquatic life with long lasting effects.
- 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

5 - 15% < 5%