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## Safety Data Sheet

According to Regulation (EC) No 1907/2006

### Persil Professional Concentrated Performance Biological Liquid

Revision: 2015-11-01

Version: 10.0

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

##### 1.1 Product identifier

**Trade name:** Persil Professional Concentrated Performance Biological Liquid  
*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 Contact details

Pakex (UK) Plc, No 1, Prime Point, Bessemer Road, Welwyn Garden City, Herts, AL7 1FE

Tel: 01707 384858

Fax: 01707 332838

[sales@pakexuk.com](mailto:sales@pakexuk.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)

**The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation**

##### 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.

## Persil Professional Concentrated Performance Biological Liquid

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

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 for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

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

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

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

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

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

Get medical attention or advice if you feel unwell.

**Skin contact:**

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

**Eye contact:**

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 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**

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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 advised 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/m<sup>3</sup>)

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

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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
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**

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 (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
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 undiluted 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 handling the diluted product:

**Recommended maximum concentration (%):** 2

**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.

**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
<b>Physical State:</b> Liquid	
<b>Colour:</b> Green	
<b>Odour:</b> Slightly perfumed	
<b>Odour threshold:</b> Not applicable	

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pH: ≈ 8 (neat)

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

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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	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/cm<sup>3</sup> (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

Method / remark

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.

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**10.5 Incompatible materials**

None known under normal use conditions.

**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): &gt;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**

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 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 <sub>50</sub>	> 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			

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## 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

## Sensitisation by skin contact

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)

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
alkyl alcohol ethoxylate	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 dodecylbenzenesulphonate			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)	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				

## 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				

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		available				
1,2-benzisothiazol-3(2H)-one		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
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 dodecylbenzenesulphonate			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

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC <sub>50</sub>	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 <sub>50</sub>	1 - 10		Method not given	
sodium dodecylbenzenesulphonate		No data available			



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

## Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC <sub>50</sub>	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			

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC <sub>50</sub>	> 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

## 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 sediment)	Species	Method	Exposure time (days)	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				

## Terrestrial toxicity

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

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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 <sub>50</sub>	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 K<sub>ow</sub>)

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 dodecylbenzenesulphonate	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 K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (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

The concentrated contents or contaminated packaging should be disposed of by a certified handler

**Persil Professional Concentrated Performance Biological Liquid**

**products:** 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.

**Suitable cleaning agents:** 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

5 - 15%

soap

< 5%

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*

**SDS code:** MSDS5812

**Version:** 10.0

**Revision:** 2015-11-01

**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

**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 R, H and EUH phrases mentioned in section 3:**

- H302-Harmfulifswalowed.
- H315-Causeskinirritation.
- H317-Maycauseanallergicreaction.
- H318-Causeseriouseyedamage.
- H330-Fatalifinhaled.
- H400-Verytoxictoaquaticlife.
- H411-Toxictoaquaticlifewithlonglastingeffects.
- H412-Harmfultoquaticlifewithlonglastingeffects.
- R22-Harmfulifswalowed.
- R23-Toxicbyinhalation.
- R38-Irritatingtoskin.
- R41-Riskofseriousdamagetoeyes.
- R43-Maycausesensitisationbyskincontact.
- R50-Verytoxictoaquaticorganisms.

**Abbreviations and acronyms:**

- AISE-TheInternationalAssociationforSoaps,DetergentsandMaintenanceProducts
- DNEL-DerivedNoEffectLimit
- EUH-CLPSpecifichazardstatement
- PBT-Persistent,BioaccumulativeandToxic
- PNEC-PredictedNoEffectConcentration

- REACHnumber-REACHregistrationnumber,withoutsupplierspecificpart
- vPvB-veryPersistentandveryBioaccumulative
- ATE-AcuteToxicityEstimate

**End of Safety Data Sheet**