

Persil Professional Concentrated Performance Biological Liquid

Revision: 2015-04-21

Version: 09.0

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 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)

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 |
|---|-----------|------------|-------------------|---|--|-------|----------------|
| 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 |
| 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 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 | | 3-10 |
| 1,2-benzisothiazol-3(2H)-one | 220-120-9 | 2634-33-5 | No data available | 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.

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

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

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

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

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

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

SECTION 4: First aid measures**4.1 Description of first aid measures****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. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

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

Persil Professional Concentrated Performance Biological Liquid

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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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) |
|---|----------------------------|--|---------------------------|---|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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) |
|---|----------------------------|--|---------------------------|---|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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 |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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/m³)

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

Persil Professional Concentrated Performance Biological Liquid

| | effects | effects | effects | effects |
|---|-------------------|-------------------|-------------------|-------------------|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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) |
|---|-----------------------------|------------------------------|---------------------|-------------------------------|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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 ³) |
|---|------------------------------|--------------------------|-------------------|--------------------------|
| sodium dodecylbenzenesulphonate | No data available | No data available | No data available | No data available |
| alkyl alcohol ethoxylate | 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.

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: No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection: Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.
Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Information in this section refers to the product, unless it is specifically stated that substance data is listed

| | Method / remark |
|---|-----------------|
| 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 | |

Substance data, boiling point

Persil Professional Concentrated Performance Biological Liquid

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|-------------------|--------|----------------------------|
| sodium dodecylbenzenesulphonate | No data available | | |
| alkyl alcohol ethoxylate | 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 determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|-------------------|--------|------------------|
| sodium dodecylbenzenesulphonate | No data available | | |
| alkyl alcohol ethoxylate | 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) |
|---|-------------------|------------------|------------------|
| sodium dodecylbenzenesulphonate | No data available | | |
| alkyl alcohol ethoxylate | 100 | Method not given | |
| 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 determined

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.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

Persil Professional Concentrated Performance Biological Liquid

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

Acute oral toxicity

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

Sensitisation

Persil Professional Concentrated Performance Biological Liquid

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|-------------------|---------|--------|-------------------|
| sodium dodecylbenzenesulphonate | No data available | | | |
| alkyl alcohol ethoxylate | 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 |
|---|-------------------|---------|--------|---------------|
| sodium dodecylbenzenesulphonate | No data available | | | |
| alkyl alcohol ethoxylate | 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) |
|---|---|-------------------|-------------------|------------------|
| sodium dodecylbenzenesulphonate | No data available | | No data available | |
| alkyl alcohol ethoxylate | No evidence for mutagenicity, negative test results | | 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 |
|---|--|
| sodium dodecylbenzenesulphonate | No data available |
| alkyl alcohol ethoxylate | No evidence for carcinogenicity, negative test results |
| 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 |
|---|----------|-----------------|--------------------|---------|--------|---------------|------------------------------------|
| sodium dodecylbenzenesulphonate | | | No data available | | | | |
| alkyl alcohol ethoxylate | | | No data available | | | | Not toxic for reproduction |
| 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 |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | 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 |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | No data available | | | | |
| sodium 2-(2-dodecyloxyethoxy)ethyl sulphate | | No data 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 |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | No data available | | | | |
| sodium 2-(2-dodecyloxyethoxy)ethyl sulphate | | No data available | | | | |

Persil Professional Concentrated Performance Biological Liquid

| | | | | | |
|------------------------------|--|-------------------|--|--|--|
| 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 |
|---|----------------|----------|--------------------|---------|--------|---------------|--------------------------------------|--------|
| sodium dodecylbenzenesulphonate | | | No data available | | | | | |
| alkyl alcohol ethoxylate | | | 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) |
|---|-------------------|
| sodium dodecylbenzenesulphonate | No data available |
| alkyl alcohol ethoxylate | 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) |
|---|-------------------|
| sodium dodecylbenzenesulphonate | No data available |
| alkyl alcohol ethoxylate | 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) |
|---|------------------|-------------------|---------|------------------|-------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | |
| alkyl alcohol ethoxylate | LC ₅₀ | 1 - 10 | | Method not given | |
| 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) |
|---|------------------|-------------------|---------|------------------|-------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | |
| alkyl alcohol ethoxylate | EC ₅₀ | 1 - 10 | | Method not given | |
| 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) |
|---|------------------|-------------------|---------|------------------|-------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | |
| alkyl alcohol ethoxylate | LC ₅₀ | 1 - 10 | | Method not given | |
| sodium 2-(2-dodecyloxyethoxy)ethyl sulphate | | No data available | | | |
| 1,2-benzisothiazol-3(2H)-one | | No data available | | | |

Persil Professional Concentrated Performance Biological Liquid

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|----------|-------------------|---------|--------|----------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | |
| alkyl alcohol ethoxylate | | 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 |
|---|------------------|-------------------|----------|------------------|---------------|
| sodium dodecylbenzenesulphonate | | No data available | | | |
| alkyl alcohol ethoxylate | EC ₅₀ | > 100 | | Method not given | |
| 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 |
|---|----------|-------------------|---------|--------|---------------|------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | 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 |
|---|----------|-------------------|---------|--------|---------------|------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | 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 |
|---|----------|---------------------------|---------|--------|----------------------|------------------|
| sodium dodecylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | 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

Persil Professional Concentrated Performance Biological Liquid

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT ₅₀ | Method | Evaluation |
|---|----------|-------------------|------------------|--------|-----------------------|
| sodium dodecylbenzenesulphonate | | | | | No data available |
| alkyl alcohol ethoxylate | | | | | Readily biodegradable |
| 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)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|-------------------|--------|------------|--------|
| sodium dodecylbenzenesulphonate | No data available | | | |
| alkyl alcohol ethoxylate | 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 |
|---|-------------------|---------|--------|------------|--------|
| sodium dodecylbenzenesulphonate | No data available | | | | |
| alkyl alcohol ethoxylate | 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 |
|---|--------------------------------|-------------------------------------|--------|--------------------|--|
| sodium dodecylbenzenesulphonate | No data available | | | | |
| alkyl alcohol ethoxylate | No data available | | | | Potential for mobility in soil, soluble in water |
| 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:**

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.

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

Persil Professional Concentrated Performance Biological Liquid

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% |
| phosphonates, soap | < 5% |
| perfumes, optical brighteners, enzymes, Benzisothiazolinone, Citronellol, Butylphenyl Methylpropional | |

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: 09.0

Revision: 2015-04-21

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):, 3, 13

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 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitisation by skin contact.
- R50 - Very toxic to aquatic organisms.

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