

Persil Bio Professional Powder

Revision: 2024-11-27

Version: 01.0

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

1.1 Product identifier

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

UFI: TQNK-U12E-J004-TP2T

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

Product use: Laundry detergent.**Uses advised against:** Uses other than those identified are not recommended.**SWED - Sector-specific worker exposure description :**

AISE_SWED_PW_8a_1

AISE_SWED_PW_8b_1

PC35-Washing and cleaning products

AISE_SWED_PW_1_1

AISE_SWED_PW_4_1

AISE_SWED_PW_19_1

PC35-Washing and cleaning products

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin irritation, Category 2 (H315)

Eye irritation, Category 2 (H319)

2.2 Label elements

**Signal word:** Warning.**Hazard statements:**

H315 + H319 - Causes skin and serious eye irritation.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Notes | Weight percent |
|-------------------------------|-----------|------------|-------------------|--|-------|----------------|
| sodium carbonate | 207-838-8 | 497-19-8 | 01-211948549 8-19 | Eye irritation, Category 2 (H319) | | 20-30 |
| Sodium percarbonate | 239-707-6 | 15630-89-4 | - | Oxidising solids, Category 2 (H272) Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) | | 10-20 |
| disodium disilicate | 215-687-4 | 1344-09-8 | 01-211944872 5-31 | Specific target organ toxicity - Single exposure, Category 3 (H335) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) | | 3-10 |
| sodium alkylbenzenesulphonate | 270-115-0 | 68411-30-3 | 01-211948942 8-22 | Acute toxicity - Oral, Category 4 (H302) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412) | | 3-10 |
| diphenyl ether | 202-981-2 | 101-84-8 | 01-211947254 5-33 | Eye irritation, Category 2 (H319) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 3 (H412) | | 0.1-1 |

Specific concentration limits

Sodium percarbonate :

- Serious eye damage, Category 1 (H318) >= 25% > Eye irritation, Category 2 (H319) >= 7.5%

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

ATE, if available, are listed in section 11.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information:

If medical advice is needed, have product container or label at hand.

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:

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. 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:

Causes irritation.

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

Repeated or prolonged contact: Wear suitable gloves.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Collect mechanically. Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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.

Advice on general occupational hygiene:

Follow general hygiene considerations recognised as common good workplace practices. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products unless advised by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep out of reach of children.

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:

| Ingredient(s) | UK - Long term value(s) | UK - Short term value(s) |
|----------------|------------------------------|-------------------------------|
| diphenyl ether | 1 ppm 7 mg/m ³ | 2 ppm 14 mg/m ³ |

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/DMEL 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 carbonate | - | - | - | - |
| Sodium percarbonate | No data available | No data available | No data available | No data available |
| disodium disilicate | - | - | - | 0.8 |
| sodium alkylbenzenesulphonate | - | - | - | 0.425 |
| diphenyl ether | No data available | No data available | No data available | No data available |

DNEL/DMEL dermal exposure - Worker

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|-------------------------------|----------------------------|--|----------------------------|---|
| sodium carbonate | - | - | No data available | - |
| Sodium percarbonate | .? mg/cm ² skin | No data available | .? mg/cm ² skin | No data available |
| disodium disilicate | No data available | - | No data available | 1.59 |
| sodium alkylbenzenesulphonate | - | - | - | 119 |
| diphenyl ether | No data available | No data available | No data available | No data available |

DNEL/DMEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---------------------|----------------------------|--|----------------------------|---|
| sodium carbonate | No data available | - | No data available | - |
| Sodium percarbonate | .? mg/cm ² skin | No data available | .? mg/cm ² skin | No data available |
| disodium disilicate | No data available | - | No data available | 0.8 |

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| | | | | |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|
| sodium alkylbenzenesulphonate | - | - | - | 42.5 |
| diphenyl ether | No data available | No data available | No data available | No data available |

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|-------------------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium carbonate | - | - | 10 | - |
| Sodium percarbonate | No data available | No data available | No data available | No data available |
| disodium disilicate | - | - | - | 5.61 |
| sodium alkylbenzenesulphonate | - | - | - | 6 |
| diphenyl ether | No data available | No data available | No data available | No data available |

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|-------------------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium carbonate | 10 | - | - | - |
| Sodium percarbonate | No data available | No data available | No data available | No data available |
| disodium disilicate | - | - | - | 1.38 |
| sodium alkylbenzenesulphonate | - | - | - | 1.5 |
| diphenyl ether | No data available | No data available | No data available | No data available |

Environmental exposure

Environmental exposure - PNEC

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|-------------------------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| sodium carbonate | - | - | - | - |
| Sodium percarbonate | No data available | No data available | No data available | No data available |
| disodium disilicate | 7.5 | 1 | 7.5 | 348 |
| sodium alkylbenzenesulphonate | 0.268 | 0.0268 | 0.0167 | 3.43 |
| diphenyl ether | 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 carbonate | - | - | - | - |
| Sodium percarbonate | No data available | No data available | No data available | No data available |
| disodium disilicate | - | - | - | - |
| sodium alkylbenzenesulphonate | 8.1 | 6.8 | 35 | - |
| diphenyl ether | No data available | No data available | No data available | No data available |

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.

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

REACH use scenarios considered for the undiluted product:

| | SWED - Sector-specific worker exposure description | LCS | PROC | Duration (min) | ERC |
|------------------------------------|--|-----|---------|----------------|-------|
| PC35-Washing and cleaning products | PC35-Washing and cleaning products | C | | - | ERC8a |
| Manual transfer and dilution | AISE_SWED_PW_8a_1 | PW | PROC 8a | 60 | ERC8a |
| Automatic transfer and dilution | AISE_SWED_PW_8b_1 | PW | PROC 8b | 60 | ERC8b |

Personal protective equipment

Eye / face protection:

Hand protection:

No special requirements under normal use conditions.

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Repeated or prolonged contact: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm

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Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min
 Material thickness: ≥ 0.4 mm
 In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

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 (% w/w): 0.88

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

| | SWED | LCS | PROC | Duration (min) | ERC |
|--|------------------------------------|-----|---------|----------------|-------|
| PC35-Washing and cleaning products | PC35-Washing and cleaning products | C | - | - | ERC8a |
| Automatic application in a dedicated closed system | AISE_SWED_PW_1_1 | PW | PROC 1 | 480 | ERC8a |
| Manual application | AISE_SWED_PW_19_1 | PW | PROC 19 | 480 | ERC8a |
| Automatic application in a dedicated system | AISE_SWED_PW_4_1 | PW | PROC 4 | 480 | ERC8a |

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.
Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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

Method / remark

Physical state: Solid

Appearance: Powder

Colour: Speckles , White

Odour: Product specific

Odour threshold: Not applicable

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

Not relevant to classification of this product

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

Not applicable to solids or gases

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|-------------------------------|-----------------------------------|------------------|----------------------------|
| sodium carbonate | 1600 | Method not given | 1013 |
| Sodium percarbonate | Product decomposes before boiling | | |
| disodium disilicate | > 100 | Method not given | |
| sodium alkylbenzenesulphonate | No data available | | |
| diphenyl ether | No data available | | |

Method / remark

Flammability (solid, gas): Not determined

Flammability (liquid): Not applicable.

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

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pH: Not applicable**Dilution pH:** ≈ 11 (0.88 %)**Kinematic viscosity:** Not applicable to solids or gases**Solubility in / Miscibility with water:** Soluble

ISO 4316

Refer Test Method Notes

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|-------------------------------|-------------------|------------------|------------------|
| sodium carbonate | 210-215 | Method not given | 20 |
| Sodium percarbonate | .? | Method not given | |
| disodium disilicate | Soluble | Method not given | 20 |
| sodium alkylbenzenesulphonate | > 250 | | |
| diphenyl ether | No data available | | |

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

Vapour pressure: Not determined**Method / remark**

See substance data

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|-------------------------------|-------------------|--------|------------------|
| sodium carbonate | Negligible | | |
| Sodium percarbonate | Negligible | | |
| disodium disilicate | No data available | | |
| sodium alkylbenzenesulphonate | No data available | | |
| diphenyl ether | No data available | | |

Relative density: ≈ 0.63 (20 °C)**Relative vapour density:** No data available.**Particle characteristics:** Not determined.**Method / remark**

OECD 109 (EU A.3)

Not applicable to solids

Not relevant to classification of this product.

9.2 Other information**9.2.1 Information with regard to physical hazard classes****Explosive properties:** Not explosive.**Oxidising properties:** Not oxidising.**Corrosion to metals:** Not determined

Not applicable to solids or gases

9.2.2 Other safety characteristics

No other relevant information 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.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**Mixture data: .

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Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

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) | ATE Oral (mg/kg) |
|-------------------------------|------------------|-------------------|---------|-------------------|-------------------|------------------|
| sodium carbonate | LD ₅₀ | 2800 | Rat | OECD 401 (EU B.1) | | Not established |
| Sodium percarbonate | LD ₅₀ | 1034 | Rat | Method not given | | Not established |
| disodium disilicate | LD ₅₀ | 3400 | Rat | Method not given | | Not established |
| sodium alkylbenzenesulphonate | LD ₅₀ | 1080 | Rat | OECD 401 (EU B.1) | | 1080 |
| diphenyl ether | | No data available | | | | Not established |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Dermal (mg/kg) |
|-------------------------------|------------------|-------------------|---------|-------------------|-------------------|--------------------|
| sodium carbonate | LD ₅₀ | > 2000 | Rabbit | Method not given | | Not established |
| Sodium percarbonate | LD ₅₀ | > .? | Rabbit | OECD 402 (EU B.3) | | Not established |
| disodium disilicate | LD ₅₀ | > 5000 | Rat | Method not given | | Not established |
| sodium alkylbenzenesulphonate | LD ₅₀ | > 2000 | Rat | OECD 402 (EU B.3) | | Not established |
| diphenyl ether | | No data available | | | | Not established |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------------------|------------------|------------------------------|---------|--------------------|-------------------|
| sodium carbonate | LC ₅₀ | > 2.3 (dust) | | Weight of evidence | 2 |
| Sodium percarbonate | | No data available | | | |
| disodium disilicate | LC ₅₀ | > 2.06 No mortality observed | Rat | Non guideline test | |
| sodium alkylbenzenesulphonate | | No data available | | | |
| diphenyl ether | | No data available | | | |

Acute inhalative toxicity, continued

| Ingredient(s) | ATE - inhalation, dust (mg/l) | ATE - inhalation, mist (mg/l) | ATE - inhalation, vapour (mg/l) | ATE - inhalation, gas (mg/l) |
|-------------------------------|-------------------------------|-------------------------------|---------------------------------|------------------------------|
| sodium carbonate | Not established | Not established | Not established | Not established |
| Sodium percarbonate | Not established | Not established | Not established | Not established |
| disodium disilicate | Not established | Not established | Not established | Not established |
| sodium alkylbenzenesulphonate | Not established | Not established | Not established | Not established |
| diphenyl ether | Not established | Not established | Not established | Not established |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|-------------------------------|-------------------|---------|-------------------|---------------|
| sodium carbonate | Not irritant | Rabbit | OECD 404 (EU B.4) | |
| Sodium percarbonate | Not irritant | Rabbit | Method not given | |
| disodium disilicate | Irritant | | Method not given | |
| sodium alkylbenzenesulphonate | Irritant | Rabbit | OECD 404 (EU B.4) | |
| diphenyl ether | No data available | | | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|-------------------------------|-------------------|---------|-------------------|---------------|
| sodium carbonate | Irritant | Rabbit | OECD 405 (EU B.5) | |
| Sodium percarbonate | Severe damage | Rabbit | EPA OPP 81-4 | |
| disodium disilicate | Severe damage | | Method not given | |
| sodium alkylbenzenesulphonate | Corrosive | Rabbit | OECD 405 (EU B.5) | |
| diphenyl ether | No data available | | | |

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Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|-------------------------------|-------------------------------------|---------|------------------|---------------|
| sodium carbonate | No data available | | | |
| Sodium percarbonate | Irritating to respiratory tract | Mouse | Method not given | |
| disodium disilicate | Irritating to respiratory tract | | Method not given | |
| sodium alkylbenzenesulphonate | Not irritating to respiratory tract | | | |
| diphenyl ether | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|-------------------------------|-------------------|------------|----------------------------------|-------------------|
| sodium carbonate | Not sensitising | | Method not given | |
| Sodium percarbonate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / Buehler test | |
| disodium disilicate | Not sensitising | | Method not given | |
| sodium alkylbenzenesulphonate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| diphenyl ether | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|-------------------------------|-------------------|---------|--------|---------------|
| sodium carbonate | No data available | | | |
| Sodium percarbonate | No data available | | | |
| disodium disilicate | No data available | | | |
| sodium alkylbenzenesulphonate | No data available | | | |
| diphenyl ether | 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 carbonate | No data available | | No data available | |
| Sodium percarbonate | No data available | | No data available | |
| disodium disilicate | No evidence for mutagenicity, negative test results | | No data available | |
| sodium alkylbenzenesulphonate | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) OECD 476 OECD 473 | No data available | |
| diphenyl ether | No data available | | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|-------------------------------|--|
| sodium carbonate | No evidence for carcinogenicity, weight-of-evidence |
| Sodium percarbonate | No data available |
| disodium disilicate | No evidence for carcinogenicity, negative test results |
| sodium alkylbenzenesulphonate | No data available |
| diphenyl ether | No data available |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|-------------------------------|----------|---------------------|--------------------|---------|--------------------|---------------|--|
| sodium carbonate | | | No data available | | | | |
| Sodium percarbonate | | | No data available | | | | |
| disodium disilicate | | | No data available | | | | No evidence for reproductive toxicity |
| sodium alkylbenzenesulphonate | NOAEL | Teratogenic effects | 300 | Rat | Non guideline test | | No known significant effects or critical hazards |
| diphenyl ether | | | 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 carbonate | | No data available | | | | |

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| | | | | | | |
|-------------------------------|-------|-------------------|-----|------------------|-----|---------------------|
| Sodium percarbonate | | No data available | | | | |
| disodium disilicate | NOAEL | > 159 | Rat | Method not given | 180 | No effects observed |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| diphenyl ether | | 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 carbonate | | No data available | | | | |
| Sodium percarbonate | | No data available | | | | |
| disodium disilicate | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| diphenyl ether | | 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 carbonate | | No data available | | | | |
| Sodium percarbonate | | No data available | | | | |
| disodium disilicate | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| diphenyl ether | | No data available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|-------------------------------|----------------|----------|--------------------|---------|--------|---------------|--------------------------------------|--------|
| sodium carbonate | | | No data available | | | | | |
| Sodium percarbonate | | | No data available | | | | | |
| disodium disilicate | | | No data available | | | | | |
| sodium alkylbenzenesulphonate | | | No data available | | | | | |
| diphenyl ether | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|-------------------------------|-------------------|
| sodium carbonate | Not applicable |
| Sodium percarbonate | No data available |
| disodium disilicate | No data available |
| sodium alkylbenzenesulphonate | Not applicable |
| diphenyl ether | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|-------------------------------|-------------------|
| sodium carbonate | Not applicable |
| Sodium percarbonate | No data available |
| disodium disilicate | Not applicable |
| sodium alkylbenzenesulphonate | Not applicable |
| diphenyl ether | No data available |

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards**11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information**12.1 Toxicity**No data is available on the mixture .Substance data, where relevant and available, are listed below:**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------------------|------------------|-------------------|----------------------------|--------------------|-------------------|
| sodium carbonate | LC ₅₀ | 300 | <i>Lepomis macrochirus</i> | Method not given | 96 |
| Sodium percarbonate | LC ₅₀ | 70.7 | <i>Pimephales promelas</i> | Method not given | |
| disodium disilicate | LC ₅₀ | 1108 | <i>Brachydanio rerio</i> | Method not given | 96 |
| sodium alkylbenzenesulphonate | LC ₅₀ | 1.67 | <i>Fish</i> | EPA-OPPTS 850.1075 | 96 |
| diphenyl ether | | No data available | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------------------|------------------|-------------------|-----------------------------|-------------------|-------------------|
| sodium carbonate | EC ₅₀ | 200-227 | <i>Ceriodaphnia dubia</i> | Method not given | 96 |
| Sodium percarbonate | EC ₅₀ | 4.9 | <i>Daphnia pulex</i> | Method not given | |
| disodium disilicate | EC ₅₀ | 1700 | <i>Daphnia magna Straus</i> | Method not given | 48 |
| sodium alkylbenzenesulphonate | LC ₅₀ | 2.9 | <i>Daphnia</i> | OECD 202 (EU C.2) | 48 |
| diphenyl ether | | No data available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------------------|--------------------------------|-------------------|----------------------------------|--------------------|-------------------|
| sodium carbonate | EC ₅₀ | > 800 | <i>Selenastrum capricornutum</i> | | 72 |
| Sodium percarbonate | EC ₅₀ | 2.62 | <i>Not specified</i> | Read across | |
| disodium disilicate | EC ₅₀ | 207 | <i>Desmodesmus subspicatus</i> | Method not given | 72 |
| sodium alkylbenzenesulphonate | E _b C ₅₀ | 47.3 | <i>Not specified</i> | Non guideline test | 72 |
| diphenyl ether | | No data available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|-------------------------------|----------|-------------------|---------|--------|----------------------|
| sodium carbonate | | No data available | | | |
| Sodium percarbonate | | No data available | | | |
| disodium disilicate | | No data available | | | |
| sodium alkylbenzenesulphonate | | No data available | | | |
| diphenyl ether | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---------------------|----------|-------------------|----------|--------|---------------|
| sodium carbonate | | No data available | | | |
| Sodium percarbonate | | No data available | | | |

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|-------------------------------|------------------|-------------------|----------|----------|-----------|
| disodium disilicate | | No data available | | | |
| sodium alkylbenzenesulphonate | EC ₅₀ | 550 | Bacteria | OECD 209 | 3 hour(s) |
| diphenyl ether | | No data available | | | |

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|-------------------------------|----------|-------------------|----------------------------|------------------|---------------|------------------|
| sodium carbonate | | No data available | | | | |
| Sodium percarbonate | NOEC | .? | <i>Pimephales promelas</i> | Method not given | .? hour(s) | |
| disodium disilicate | NOEC | 348 | <i>Brachydanio rerio</i> | Method not given | 96 hour(s) | |
| sodium alkylbenzenesulphonate | NOEC | 0.23 | <i>Oncorhynchus mykiss</i> | Method not given | 72 day(s) | |
| diphenyl ether | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|-------------------------------|----------|-------------------|----------------------|------------------|---------------|------------------|
| sodium carbonate | | No data available | | | | |
| Sodium percarbonate | NOEC | .? | <i>Daphnia pulex</i> | Method not given | .? hour(s) | |
| disodium disilicate | | No data available | | | | |
| sodium alkylbenzenesulphonate | NOEC | 1.41 | <i>Daphnia magna</i> | OECD 211 | | |
| diphenyl ether | | 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 carbonate | | No data available | | | | |
| Sodium percarbonate | | No data available | | | | |
| disodium disilicate | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| diphenyl ether | | No data available | | | | |

Terrestrial toxicity

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

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

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
|------------------|----------|-------------------|---------|--------|----------------------|------------------|
| sodium carbonate | | No data available | | | | |

Terrestrial toxicity - beneficial insects, if available:

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

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|--|--|-----------|--|--|--|
| | | available | | | |
|--|--|-----------|--|--|--|

Terrestrial toxicity - soil bacteria, if available:

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

12.2 Persistence and degradability**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

| Ingredient(s) | Half-life time | Method | Evaluation | Remark |
|---------------------|-------------------|------------------|------------|--------|
| sodium carbonate | No data available | | | |
| Sodium percarbonate | .? | Method not given | | |

Abiotic degradation - hydrolysis, if available:

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

Abiotic degradation - other processes, if available:

| Ingredient(s) | Type | Half-life time | Method | Evaluation | Remark |
|------------------|------|-------------------|--------|------------|--------|
| sodium carbonate | | No data available | | | |

Biodegradation

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT ₅₀ | Method | Evaluation |
|-------------------------------|--------------------------|----------------------------|-------------------|-----------|--------------------------------------|
| sodium carbonate | | | | | Not applicable (inorganic substance) |
| Sodium percarbonate | | | | | Not applicable (inorganic substance) |
| disodium disilicate | | | | | Not applicable (inorganic substance) |
| sodium alkylbenzenesulphonate | Activated sludge, aerobe | CO ₂ production | 85 % in 28 day(s) | OECD 301B | Readily biodegradable |
| diphenyl ether | | | | OECD 301C | Not readily biodegradable. |

Ready biodegradability - anaerobic and marine conditions, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT ₅₀ | Method | Evaluation |
|------------------|---------------|-------------------|------------------|--------|-------------------|
| sodium carbonate | | | | | No data available |

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT ₅₀ | Method | Evaluation |
|------------------|---------------|-------------------|------------------|--------|-------------------|
| sodium carbonate | | | | | No data available |

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log K_{ow})

| Ingredient(s) | Value | Method | Evaluation | Remark |
|-------------------------------|-------------------|------------------|-----------------------------------|--------|
| sodium carbonate | No data available | | No bioaccumulation expected | |
| Sodium percarbonate | No data available | | | |
| disodium disilicate | No data available | | Low potential for bioaccumulation | |
| sodium alkylbenzenesulphonate | 3.32 | Method not given | Low potential for bioaccumulation | |
| diphenyl ether | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|-------------------------------|-------------------|---------|------------------|------------------------------------|--------|
| sodium carbonate | No data available | | | No bioaccumulation expected | |
| Sodium percarbonate | No data available | | | | |
| disodium disilicate | No data available | | | | |
| sodium alkylbenzenesulphonate | 2-1000 | | Method not given | High potential for bioaccumulation | |
| diphenyl ether | No data available | | | | |

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|-------------------------------|--------------------------------|-------------------------------------|--------|--------------------|--|
| sodium carbonate | No data available | | | | Potential for mobility in soil, soluble in water |
| Sodium percarbonate | No data available | | | | High potential for mobility in soil |
| disodium disilicate | No data available | | | | |
| sodium alkylbenzenesulphonate | No data available | | | | |
| diphenyl ether | 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 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue:

20 01 29* - detergents containing dangerous substances.

Empty packaging

Recommendation:

Dispose of observing national or local regulations.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

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 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations :

- Control of Poisons and Explosives Precursors Regulations 2015
- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to Detergents Regulation

oxygen-based bleaching agents, anionic surfactants

5 - 15 %

non-ionic surfactants, zeolites, polycarboxylates, soap

< 5 %

perfumes , enzymes, optical brighteners, Alpha-Isomethyl Ionone, Benzyl Benzoate, Hexyl Cinnamal, Amyl Salicylate, Tetramethyl Acetyl octahydronaphthalenes

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: Not classified

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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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.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- H272 - May intensify fire; oxidiser.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H412 - Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet