

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Horizon Bio

Revision: 2024-11-11

Version: 09.6

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

1.1 Product identifier

Trade name: Horizon Bio

UFI: 9C60-70NE-800H-NNKJ

1.2 Relevant identified uses of the substance or mixture and uses advised against Product use: Laundry detergent. For professional use only. Uses other than those identified are not recommended.

Uses advised against:

SWED - Sector-specific worker exposure description : AISE_SWED_PW_8a_2 AISE_SWED_PW_1_1 AISE_SWED_PW_4_1

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

Eye irritation, Category 2 (H319)

2.2 Label elements



Signal word: Warning.

Hazard statements: H319 - Causes serious eye irritation.

2.3 Other hazards No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH | Classification | Notes | Weight |
|---------------------|-----------|------------|--------------|-------------------------------------|-------|---------|
| | | | number | | | percent |
| sodium carbonate | 207-838-8 | 497-19-8 | 01-211948549 | Eye irritation, Category 2 (H319) | | 10-20 |
| | | | 8-19 | | | |
| sodium percarbonate | 239-707-6 | 15630-89-4 | 01-211945726 | Oxidising solids, Category 3 (H272) | | 3-10 |

| | | | | Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) | |
|-------------------------------|-----------|------------|------|--|------|
| disodium disilicate | 215-687-4 | 1344-09-8 | 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 | 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 |
| alkyl alcohol ethoxylate | [4] | 69011-36-5 | [4] | Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) | 1-3 |

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.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006. 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 | |
|---------------------------------------|--|
| 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 effe | ects, both acute and delayed |

| 4.2 Most important symptoms and ene | cis, both acute and aciayed |
|-------------------------------------|---|
| 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

Wear eye/face protection.

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:

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 Diversey. Wash hands before breaks and at the end of workday. Avoid contact with 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. 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/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 | - | - | - | - |
| disodium disilicate | - | - | - | 0.8 |
| sodium alkylbenzenesulphonate | - | - | - | 0.425 |
| alkyl alcohol ethoxylate | - | - | - | - |

DNEL/DMEL dermal exposure - Worker

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|-------------------------------|------------------------------|-----------------------|------------------------------|----------------------|
| | effects | effects (mg/kg bw) | effects | effects (mg/kg bw) |
| sodium carbonate | - | - | No data available | - |
| sodium percarbonate | 12.8 mg/cm ² skin | - | 12.8 mg/cm ² skin | - |
| disodium disilicate | No data available | - | No data available | 1.59 |
| sodium alkylbenzenesulphonate | - | - | - | 119 |
| alkyl alcohol ethoxylate | - | - | - | - |

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 | 6.4 mg/cm ² skin | - | 6.4 mg/cm ² skin | - |
| disodium disilicate | No data available | - | No data available | 0.8 |
| sodium alkylbenzenesulphonate | - | - | - | 42.5 |
| alkyl alcohol ethoxylate | - | - | - | - |

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 | - | - | 5 | - |
| disodium disilicate | - | - | - | 5.61 |
| sodium alkylbenzenesulphonate | - | - | - | 6 |
| alkyl alcohol ethoxylate | - | - | - | - |

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 | - | - | - | - |
| disodium disilicate | - | - | - | 1.38 |
| sodium alkylbenzenesulphonate | - | - | - | 1.5 |
| alkyl alcohol ethoxylate | - | - | - | - |

Environmental exposure

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|-------------------------------|--------------------------------|---------------------------------|---------------------|----------------------------------|
| sodium carbonate | - | - | - | - |
| sodium percarbonate | 0.035 | 0.035 | 0.035 | 16.24 |
| disodium disilicate | 7.5 | 1 | 7.5 | 348 |
| sodium alkylbenzenesulphonate | 0.268 | 0.0268 | 0.0167 | 3.43 |
| alkyl alcohol ethoxylate | - | - | - | - |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|-------------------------------|---------------------------------|-----------------------------|--------------|-------------|
| sodium carbonate | - | - | - | - |
| sodium percarbonate | - | - | - | - |
| disodium disilicate | - | - | - | - |
| sodium alkylbenzenesulphonate | 8.1 | 6.8 | 35 | - |
| alkyl alcohol ethoxylate | - | - | - | - |

8.2 Exposure controls

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

Recommended safety measures for handling the <u>undiluted</u> product:

| 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 |
|------------------------------|--|-----|---------|-------------------|-------|
| Manual transfer and dilution | AISE_SWED_PW_8a_2 | PW | PROC 8a | 60 | ERC8a |

Personal protective equipment

| Eye / face protection: | No special requirements under normal use conditions. |
|--------------------------------------|--|
| Hand protection: Body protection: | No special requirements under normal use conditions. No special requirements under normal use conditions. |
| Respiratory protection: | If exposure to dust cannot be avoided use: full-face mask (EN 136) with filter type HEPA (N100, |
| | Class H14) (EN 1822) or self-contained or compressed air breathing apparatus (EN 137 / EN 138) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. |
| | No. and a factor of the second s |

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

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (% w/w): 1.19

| 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 |
|--|------------------|-----|--------|-------------------|-------|
| Automatic application in a dedicated closed system | AISE_SWED_PW_1_1 | PW | PROC 1 | 480 | ERC8a |
| Automatic application in a dedicated system | AISE_SWED_PW_4_1 | PW | PROC 4 | 480 | ERC8a |

Personal protective equipment

| No special requirements under normal use conditions. |
|--|
| No special requirements under normal use conditions. |
| No special requirements under normal use conditions. |
| No special requirements under normal use conditions. |
| |
| |

Environmental exposure controls:

Substance data boiling point

rols: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Information in this section refers to the product, unless it is specifically stated that substance data is listed

Physical state: Solid Appearance: Powder Colour: Speckles , from White to Blue Odour: Product specific Odour threshold: Not applicable Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined

Not relevant to classification of this product Not applicable to solids or gases

| 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 | | |
| alkyl alcohol ethoxylate | > 200 | Method not given | |

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:

Autoignition temperature: Not determined Decomposition temperature: Not applicable. pH: Not applicable Dilution pH: ≈ 11 (1.2 %) Kinematic viscosity: Not applicable to solids or gases Solubility in / Miscibility with water: Soluble

Substance data, solubility in water

| Ingredient(s) | Value | Method | Temperature |
|-------------------------------|---------|------------------|-------------|
| | (g/l) | | (°C) |
| sodium carbonate | 210-215 | Method not given | 20 |
| sodium percarbonate | 140 | Method not given | 20 |
| disodium disilicate | Soluble | Method not given | 20 |
| sodium alkylbenzenesulphonate | > 250 | | |
| alkyl alcohol ethoxylate | Soluble | Method not given | 20 |

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

Method / remark

See substance data

Vapour pressure: Not determined

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 | | |
| alkyl alcohol ethoxylate | Negligible | Method not given | 20-25 |

Method / remark

Method / remark

Method / remark

ISO 4316 Not applicable to solids or gases Relative density: ≈ 0.85 (20 °C) Relative vapour density: No data available. Particle characteristics: Not determined.

9.2 Other information

9.2.1 Information with regard to physical hazard classesExplosive properties: Not explosive.Oxidising properties: Not oxidising.Corrosion to metals: Not determined

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:

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

| 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) | | 2800 |
| sodium percarbonate | LD 50 | 1034 | Rat | Method not given | | 1034 |
| disodium disilicate | LD 50 | 3400 | Rat | Method not given | | Not established |
| sodium alkylbenzenesulphonate | LD 50 | 1080 | Rat | OECD 401 (EU B.1) | | 1080 |
| alkyl alcohol ethoxylate | LD 50 | > 300-2000 | Rat | OECD 423 (EU B.1 tris) | | Not established |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Dermal |
|-------------------------------|----------|------------------|---------|-------------------|----------------------|-----------------|
| a a di una a a da a a a ta | | (mg/kg) | Datati | Mathead materia | | (mg/kg) |
| sodium carbonate | LD 50 | > 2000 | Rabbit | Method not given | | Not established |
| sodium percarbonate | LD 50 | > 2000 | 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 |
| alkyl alcohol ethoxylate | LD 50 | > 2000 | Rabbit | Method not given | | Not established |

Method / remark OECD 109 (EU A.3) Not applicable to solids Not relevant to classification of this product.

Not applicable to solids or gases

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 | | | |
| alkyl alcohol ethoxylate | | 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 |
| alkyl alcohol ethoxylate | 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) | |
| alkyl alcohol ethoxylate | Not irritant | Rabbit | OECD 404 (EU B.4) | |

| 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) | |
| alkyl alcohol ethoxylate | Severe damage | Rabbit | Method not given | |

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 | | | |
| alkyl alcohol ethoxylate | 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 | |
| alkyl alcohol ethoxylate | Not sensitising | Guinea pig | Method not given | |

Sensitisation by inhalation Ingredient(s) Result Species Method Exposure time sodium carbonate No data available sodium percarbonate No data available

| alkyl alcohol ethoxylate | No data available | |
|--------------------------|-------------------|--|

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|-------------------------------|---|---|--|---------------------|
| 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 | | |
| alkyl alcohol ethoxylate | No evidence of genotoxicity, negative test results | | No evidence of genotoxicity, negative test results | Method not given |

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 |
| alkyl alcohol ethoxylate | No evidence for carcinogenicity, weight-of-evidence |

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 alkylbenzenesulphonat e | NOAEL | Teratogenic effects | 300 | Rat | Non guideline test | | No known significant effects or critical hazards |
| alkyl alcohol ethoxylate | NOAEL | Teratogenic effects | > 50 | Rat | Not known | | No known significant effects or critical hazards |

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 | | | | uncolcu |
| sodium percarbonate | | No data available | | | | |
| disodium disilicate | NOAEL | > 159 | Rat | Method not given | 180 | No effects observed |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| alkyl alcohol ethoxylate | | 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 | | | | |
| alkyl alcohol ethoxylate | | No data | | | | |
| | | available | | | | |

Sub-chronic inhalation toxicity

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

| disodium disilicate | No data available | | |
|-------------------------------|----------------------|--|--|
| sodium alkylbenzenesulphonate | No data available | | |
| alkyl alcohol ethoxylate | 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 alkylbenzenesulphonat e | | | No data available | | | | | |
| alkyl alcohol ethoxylate | Oral | NOAEL | 50 | Rat | Method not given | 24 month(s) | Effects on organ weights | |

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 |
| alkyl alcohol ethoxylate | Not applicable |

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 |
| alkyl alcohol ethoxylate | Not applicable |

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 | Lepomis macrochirus | Method not given | 96 |
| sodium percarbonate | LC 50 | 70.7 | Pimephales promelas | Method not given | 96 |
| disodium disilicate | LC 50 | 1108 | Brachydanio rerio | Method not given | 96 |
| sodium alkylbenzenesulphonate | LC 50 | 1.67 | Fish | EPA-OPPTS 850.1075 | 96 |
| alkyl alcohol ethoxylate | LC 50 | > 1 - 10 | Cyprinus carpio | OECD 203 (EU C.1) | 96 |

|--|

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------------------|----------|-----------------|-------------------------|-------------------|----------------------|
| sodium carbonate | EC 50 | 200-227 | Ceriodaphnia dubia | Method not given | 96 |
| sodium percarbonate | EC 50 | 4.9 | Daphnia pulex | Method not given | 48 |
| disodium disilicate | EC 50 | 1700 | Daphnia magna Straus | Method not given | 48 |
| sodium alkylbenzenesulphonate | LC 50 | 2.9 | Daphnia | OECD 202 (EU C.2) | 48 |
| alkyl alcohol ethoxylate | EC 50 | 1 - 10 | Daphnia magna Straus | OECD 202, static | 48 |

| Aquatic short-term toxicity - algae | | | | | |
|-------------------------------------|----------|-----------------|----------------------------|--------------------|----------------------|
| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
| sodium carbonate | EC 50 | > 800 | Selenastrum capricornutum | | 72 |
| sodium percarbonate | EC 50 | 2.5 | Chlorella vulgaris | Read across | |
| disodium disilicate | EC 50 | 207 | Desmodesmus subspicatus | Method not given | 72 |
| sodium alkylbenzenesulphonate | E b C 50 | 47.3 | Not specified | Non guideline test | 72 |
| alkyl alcohol ethoxylate | EC 50 | 1 - 10 | Desmodesmus subspicatus | OECD 201, static | 72 |

| 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 | | | |
| alkyl alcohol ethoxylate | | No data available | | | |

| Ingredient(s) | Endpoint | Value | Inoculum | Method | Exposure |
|-------------------------------|----------|-----------|-----------|--------------------|-------------|
| | | (mg/l) | | | time |
| sodium carbonate | | No data | | | |
| | | available | | | |
| sodium percarbonate | EC 50 | 466 | Activated | OECD 209 | 0.5 hour(s) |
| | | | sludge | | |
| disodium disilicate | | No data | | | |
| | | available | | | |
| sodium alkylbenzenesulphonate | EC 50 | 550 | Bacteria | OECD 209 | 3 hour(s) |
| alkyl alcohol ethoxylate | EC 10 | > 10000 | Activated | DIN 38412 / Part 8 | 17 hour(s) |
| | | | sludge | | |

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 | 7.4 | Pimephales promelas | Method not given | 96 hour(s) | |
| disodium disilicate | NOEC | 348 | Brachydanio rerio | Method not given | 96 hour(s) | |
| sodium alkylbenzenesulphonate | NOEC | 0.23 | Oncorhynchus mykiss | Method not given | 72 day(s) | |
| alkyl alcohol ethoxylate | | 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 | 2 | Daphnia pulex | Method not given | 48 hour(s) | |
| disodium disilicate | | No data | | | | |

| | | available | | | |
|-------------------------------|------|-----------|---------|----------|--|
| sodium alkylbenzenesulphonate | NOEC | 1.41 | Daphnia | OECD 211 | |
| | | | magna | | |
| alkyl alcohol ethoxylate | | 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 | | | | |
| alkyl alcohol ethoxylate | | No data available | | | | |

Terrestrial toxicity

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

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Effects observed |
|--------------------------|----------|-----------|----------------|--------|-------------|------------------|
| | | (mg/kg dw | | | time (days) | |
| | | soil) | | | | |
| sodium carbonate | | No data | | | | |
| | | available | | | | |
| alkyl alcohol ethoxylate | NOEC | 220 | Eisenia fetida | | | |

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 | | | | |
| alkyl alcohol ethoxylate | NOEC | 10 | Lepidium sativum | OECD 208 | | |

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 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 | NA | 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 | < 1 day(s) | Method not given | Hydrolysible | |

Abiotic degradation - other processes, if available:

| In | gredient(s) | Туре | 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 |
| alkyl alcohol ethoxylate | Activated sludge, aerobe | CO ₂ production | > 60 % in 28 day(s) | OECD 301B | 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 potential Partition coefficient n-octanol/water (log Kow)

| Fartition coefficient n-octanol/water (log | NOW) | | | |
|--|-------------------|------------------|-----------------------------------|--------|
| 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 | |
| alkyl alcohol ethoxylate | 4.09 | QSAR | No bioaccumulation expected | |

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 alkylbenzenesulphonat e | 2-1000 | | Method not given | High potential for bioaccumulation | |
| alkyl alcohol ethoxylate | - | | | No bioaccumulation expected | |

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 | | | | |
| alkyl alcohol ethoxylate | No data available | | | | Immobile in soil or sediment |

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:

European Waste Catalogue:

Empty packaging Recommendation:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation. 20 01 29* - detergents containing dangerous substances.

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 | 5 - 15 % |
|--|----------|
| anionic surfactants, non-ionic surfactants, zeolites | < 5 % |
| perfumes, optical brighteners, enzymes | |

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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Reason for revision:

This data sheet contains changes from the previous version in section(s):, 4, 9, 16

Classification procedure

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

Revision: 2024-11-11

Abbreviations and acronyms:

- · AISE The international Association for Soaps, Detergents and Maintenance Products
- ATE Acute Toxicity Estimate

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 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

- NOAEL No observed adverse effect level
 NOEL No observed adverse 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
 Whith user Derestate and user Discourse under the second second
- 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.
 H412 Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet