

**Clax Revoflow Pro Micro Pur-Eco 30X2**

Revision: 2024-08-09

Version: 05.2

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

**1.1 Product identifier**

**Trade name:** Clax Revoflow Pro Micro Pur-Eco 30X2

UFI: DDT6-V0WD-P009-8V4M

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

**Product use:** Laundry detergent.  
For professional use only.  
**Uses advised against:** Uses other than those identified are not recommended.

**SWED - Sector-specific worker exposure description :**

AISE\_SWED\_PW\_8b\_2  
AISE\_SWED\_PW\_1\_1

**1.3 Details of the supplier of the safety data sheet**

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

**Contact details**

Tandur Hf.  
Hesthálsi 12, 110 Reykjavík  
Tel. 5101200, Email: tandur@tandur.is

**1.4 Emergency telephone number**

Seek medical advice (show the label or safety data sheet where possible).  
Poison Center: (+354) 543-2222  
Emergency services: 112.

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Serious eye damage, Category 1 (H318)

**2.2 Label elements**



**Signal word:** Danger.

Contains Alcohols, C10-16, ethoxylated (7-<15 EO) (C12-15 Pareth-7), subtilisin (Subtilisin)

**Hazard statements:**

H318 - Causes serious eye damage.  
EUH208 - May produce an allergic reaction.

**Precautionary statements:**

P280 - Wear eye or face protection.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTRE, doctor or physician.

**2.3 Other hazards**

No other hazards known.

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

**3.2 Mixtures**

## Clax Revoflow Pro Micro Pur-Eco 30X2

| Ingredient(s)                            | EC number | CAS number | REACH number         | Classification   | Notes | Weight percent |
|--|-----------|------------|----------------------|--|-------|----------------|
| sodium carbonate                         | 207-838-8 | 497-19-8   | 01-211948549<br>8-19 | Eye irritation, Category 2 (H319)  |       | 30-50          |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | [4]       | 68002-97-1 | [4]                  | Acute toxicity - Oral, Category 4 (H302)<br>Serious eye damage, Category 1 (H318)<br>Chronic aquatic toxicity, Category 3 (H412)   |       | 3-10           |
| sodium sulphate                          | 231-820-9 | 7757-82-6  | 01-211951922<br>6-43 | Not classified as hazardous  |       | 1-3            |
| sodium carboxymethyl cellulose           | [4]       | 9004-32-4  | [4]                  | Not classified as hazardous  |       | 1-3            |
| subtilisin                               | 232-752-2 | 9014-01-1  | 01-211948043<br>4-38 | Acute toxicity - Oral, Category 4 (H302)<br>Specific target organ toxicity - Single exposure, Category 3 (H335)<br>Skin irritation, Category 2 (H315)<br>Serious eye damage, Category 1 (H318)<br>Respiratory sensitisation, Category 1 (H334)<br>Acute aquatic toxicity, Category 1 M=1 (H400)<br>Chronic aquatic toxicity, Category 2 (H411) |       | 0.1-1          |

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. Immediately call a POISON CENTRE, doctor or physician.

**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:**

No known effects or symptoms in normal use.

**Eye contact:**

Causes severe or permanent damage.

**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.

**Advices on general occupational hygiene:**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by 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:

| Ingredient(s) | Long term value(s) | Short term value(s)       |
|---------------|--------------------|---------------------------|
| subtilisin    |                    | 0.00006 mg/m <sup>3</sup> |

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                         | -                          | -                             | -                         | -                            |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                          | -                             | -                         | -                            |
| sodium sulphate                          | -                          | -                             | -                         | -                            |
| sodium carboxymethyl cellulose           | -                          | -                             | -                         | -                            |
| subtilisin                               | -                          | 3.6                           | -                         | 1.8                          |

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         | -                                       |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                          | -  | No data available         | -                                       |
| sodium sulphate                          | -                          | -  | -                         | -                                       |
| sodium carboxymethyl cellulose           | No data available          | -  | No data available         | -                                       |
| subtilisin                               | 0.2 %                      | -  | -                         | -                                       |

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         | -                                       |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                          | -  | No data available         | -                                       |
| sodium sulphate                          | -                          | -  | -                         | -                                       |
| sodium carboxymethyl cellulose           | No data available          | -  | No data available         | -                                       |
| subtilisin                               | 0.2 %                      | -  | -                         | -                                       |

DNEL/DMEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

| Ingredient(s)    | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium carbonate | -                          | -                             | 10                        | -                            |

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|--|---|---|---------|----|
| Alcohols, C10-16, ethoxylated (7-<15 EO) | - | - | -       | -  |
| sodium sulphate                          | - | - | 20      | 20 |
| sodium carboxymethyl cellulose           | - | - | -       | -  |
| subtilisin                               | - | - | 0.00006 | -  |

DNEL/DMEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

| Ingredient(s)                            | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|--|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium carbonate                         | 10                         | -                             | -                         | -                            |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                          | -                             | -                         | -                            |
| sodium sulphate                          | -                          | -                             | 12                        | 12                           |
| sodium carboxymethyl cellulose           | -                          | -                             | -                         | -                            |
| subtilisin                               | -                          | -                             | 0.000015                  | -                            |

## 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                         | -                           | -                            | -                   | -                             |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                           | -                            | -                   | -                             |
| sodium sulphate                          | -                           | -                            | -                   | -                             |
| sodium carboxymethyl cellulose           | -                           | -                            | -                   | -                             |
| subtilisin                               | 0.00006                     | 0.000006                     | -                   | 65                            |

## Environmental exposure - PNEC, continued

| Ingredient(s)                            | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m <sup>3</sup> ) |
|--|------------------------------|--------------------------|--------------|--------------------------|
| sodium carbonate                         | -                            | -                        | -            | -                        |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | -                            | -                        | -            | -                        |
| sodium sulphate                          | -                            | -                        | -            | -                        |
| sodium carboxymethyl cellulose           | -                            | -                        | -            | -                        |
| subtilisin                               | -                            | -                        | -            | -                        |

## 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:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.
- 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   |
|---------------------------------|--|-----|---------|----------------|-------|
| Automatic transfer and dilution | AISE_SWED_PW_8b_2                                  | PW  | PROC 8b | 60             | ERC8b |

## Personal protective equipment

- Eye / face protection:** Safety glasses or goggles (EN 16321 / EN 166).
- Hand protection:** No special requirements under normal use conditions.
- Body protection:** 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.

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

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.14

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

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## 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 |

## Personal protective equipment

|                                |  |
|--------------------------------|--|
| <b>Eye / face protection:</b>  | No special requirements under normal use conditions. |
| <b>Hand protection:</b>        | No special requirements under normal use conditions. |
| <b>Body protection:</b>        | No special requirements under normal use conditions. |
| <b>Respiratory protection:</b> | 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

**Colour:** Speckles , Medium , 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                       |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |                  |                            |
| sodium sulphate                          | 1429              | Method not given | 1013                       |
| sodium carboxymethyl cellulose           | No data available |                  |                            |
| subtilisin                               | 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

See substance data

Substance data, flammability or explosive limits, if available:

| Ingredient(s) | Lower limit (% vol) | Upper limit (% vol) |
|---------------|---------------------|---------------------|
| subtilisin    | -                   | -                   |

## Method / remark

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**pH:** Not applicable

**Dilution pH:** ≈ 11 (0.14 %)

ISO 4316

**Kinematic viscosity:** Not determined

Not applicable to solids or gases

**Solubility in / Miscibility with water:** Soluble

Substance data, solubility in water

| Ingredient(s)                            | Value (g/l)       | Method           | Temperature (°C) |
|--|-------------------|------------------|------------------|
| sodium carbonate                         | 210-215           | Method not given | 20               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |                  |                  |
| sodium sulphate                          | 186               | Method not given | 20               |
| sodium carboxymethyl cellulose           | Soluble           | Method not given |                  |
| subtilisin                               | No data available |                  |                  |

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

## Method / remark

**Vapour pressure:** Not determined

See substance data

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Substance data, vapour pressure

| Ingredient(s)                            | Value (Pa)        | Method | Temperature (°C) |
|--|-------------------|--------|------------------|
| sodium carbonate                         | Negligible        |        |                  |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | < 0.15            |        | 20               |
| sodium sulphate                          | No data available |        |                  |
| sodium carboxymethyl cellulose           | No data available |        |                  |
| subtilisin                               | Not applicable    |        |                  |

**Relative density:** ≈ 1.01 (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 Weight of evidence

**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): &gt;2000

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 <sub>50</sub> | 2800          | Rat     | OECD 401 (EU B.1)  |                   | 2800             |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | LD <sub>50</sub> | 300-2000      | Rat     | Weight of evidence |                   | 1000             |
| sodium sulphate                          | LD <sub>50</sub> | 10000         | Rat     | Method not given   |                   | Not established  |
| sodium carboxymethyl cellulose           | LD <sub>50</sub> | > 2500        | Rat     | Method not given   |                   | Not established  |
| subtilisin                               | LD <sub>50</sub> | 1800          | Rat     | OECD 401 (EU B.1)  |                   | 1800             |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Dermal (mg/kg) |
|---------------|----------|---------------|---------|--------|-------------------|--------------------|
|---------------|----------|---------------|---------|--------|-------------------|--------------------|

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|  |                  |                   |        |                  |  |                 |
|--|------------------|-------------------|--------|------------------|--|-----------------|
| sodium carbonate                         | LD <sub>50</sub> | > 2000            | Rabbit | Method not given |  | Not established |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | LD <sub>50</sub> | > 2000            |        | Method not given |  | Not established |
| sodium sulphate                          | LD <sub>50</sub> | > 2000            |        |                  |  | Not established |
| sodium carboxymethyl cellulose           | LD <sub>50</sub> | > 2000            | Rabbit | Method not given |  | Not established |
| subtilisin                               |                  | No data available |        |                  |  | Not established |

## Acute inhalative toxicity

| Ingredient(s)                            | Endpoint         | Value (mg/l)      | Species | Method             | Exposure time (h) |
|--|------------------|-------------------|---------|--------------------|-------------------|
| sodium carbonate                         | LC <sub>50</sub> | > 2.3 (dust)      |         | Weight of evidence | 2                 |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |                  | No data available |         |                    |                   |
| sodium sulphate                          |                  | No data available |         |                    |                   |
| sodium carboxymethyl cellulose           | LC <sub>50</sub> | > 5800            | Rat     | Method not given   |                   |
| subtilisin                               |                  | -                 |         | Weight of evidence |                   |

## 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              |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | Not established               | Not established               | Not established                 | Not established              |
| sodium sulphate                          | Not established               | Not established               | Not established                 | Not established              |
| sodium carboxymethyl cellulose           | Not established               | Not established               | Not established                 | Not established              |
| subtilisin                               | 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) |               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | Not irritant      | Rabbit  | Method not given  |               |
| sodium sulphate                          | No data available |         |                   |               |
| sodium carboxymethyl cellulose           | Not irritant      | Rabbit  | Method not given  |               |
| subtilisin                               | Mild 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) |               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | Severe damage             | Rabbit  | Method not given  |               |
| sodium sulphate                          | No data available         |         |                   |               |
| sodium carboxymethyl cellulose           | Not corrosive or irritant | Rabbit  | Method not given  |               |
| subtilisin                               | Not corrosive or irritant | Rabbit  | OECD 405 (EU B.5) |               |

## Respiratory tract irritation and corrosivity

| Ingredient(s)                            | Result                          | Species | Method | Exposure time |
|--|---------------------------------|---------|--------|---------------|
| sodium carbonate                         | No data available               |         |        |               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available               |         |        |               |
| sodium sulphate                          | No data available               |         |        |               |
| sodium carboxymethyl cellulose           | No data available               |         |        |               |
| subtilisin                               | Irritating to respiratory tract |         |        |               |

## Sensitisation

## Sensitisation by skin contact

| Ingredient(s)                            | Result            | Species    | Method           | Exposure time (h) |
|--|-------------------|------------|------------------|-------------------|
| sodium carbonate                         | Not sensitising   |            | Method not given |                   |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | Not sensitising   | Guinea pig | Method not given |                   |
| sodium sulphate                          | Not sensitising   |            | Method not given |                   |
| sodium carboxymethyl cellulose           | No data available |            |                  |                   |
| subtilisin                               | No data available |            |                  |                   |

## Sensitisation by inhalation

| Ingredient(s)                            | Result            | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| sodium carbonate                         | No data available |         |        |               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |         |        |               |

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|--------------------------------|-------------------|--|--------------------|--|
| sodium sulphate                | No data available |  |                    |  |
| sodium carboxymethyl cellulose | No data available |  |                    |  |
| subtilisin                     | Sensitising       |  | Weight of evidence |  |

**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                                   |                  |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No evidence for mutagenicity, negative test results | Method not given  | No evidence for mutagenicity, negative test results | Method not given |
| sodium sulphate                          | No evidence for mutagenicity                        |   | No data available                                   |                  |
| sodium carboxymethyl cellulose           | No data available                                   |   | No data available                                   |                  |
| subtilisin                               | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) OECD 473 OECD 476 (Chinese Hamster Ovary) | No data available                                   |                  |

## Carcinogenicity

| Ingredient(s)                            | Effect  |
|--|---|
| sodium carbonate                         | No evidence for carcinogenicity, weight-of-evidence |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No evidence for carcinogenicity, weight-of-evidence |
| sodium sulphate                          | No evidence for carcinogenicity, weight-of-evidence |
| sodium carboxymethyl cellulose           | No data available                                   |
| subtilisin                               | 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  |         |            |               |   |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          |                 | No data available  |         | Literature |               | No evidence for teratogenic effects No evidence for reproductive toxicity |
| sodium sulphate                          |          |                 | No data available  |         |            |               | No evidence for reproductive toxicity                                     |
| sodium carboxymethyl cellulose           |          |                 | No data available  |         |            |               |   |
| subtilisin                               |          |                 | 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  |         |        |                      |                                      |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          | No data available  |         |        |                      |                                      |
| sodium sulphate                          |          | No data available  |         |        |                      |                                      |
| sodium carboxymethyl cellulose           |          | No data available  |         |        |                      |                                      |
| subtilisin                               |          | 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  |         |        |                      |                                      |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          | No data available  |         |        |                      |                                      |
| sodium sulphate                          |          | No data available  |         |        |                      |                                      |
| sodium carboxymethyl cellulose           |          | No data available  |         |        |                      |                                      |
| subtilisin                               |          | No data available  |         |        |                      |                                      |

## Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Specific effects and organs |
|---------------|----------|-------|---------|--------|----------|-----------------------------|
|---------------|----------|-------|---------|--------|----------|-----------------------------|



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|  | (mg/kg bw/d)      | time (days) | affected |
|--|-------------------|-------------|----------|
| sodium carbonate                         | No data available |             |          |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |             |          |
| sodium sulphate                          | No data available |             |          |
| sodium carboxymethyl cellulose           | No data available |             |          |
| subtilisin                               | 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  |         |        |               |                                      |        |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |                |          | No data available  |         |        |               |                                      |        |
| sodium sulphate                          |                |          | No data available  |         |        |               |                                      |        |
| sodium carboxymethyl cellulose           |                |          | No data available  |         |        |               |                                      |        |
| subtilisin                               |                |          | No data available  |         |        |               |                                      |        |

## STOT-single exposure

| Ingredient(s)                            | Affected organ(s) |
|--|-------------------|
| sodium carbonate                         | Not applicable    |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |
| sodium sulphate                          | No data available |
| sodium carboxymethyl cellulose           | No data available |
| subtilisin                               | Respiratory tract |

## STOT-repeated exposure

| Ingredient(s)                            | Affected organ(s) |
|--|-------------------|
| sodium carbonate                         | Not applicable    |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |
| sodium sulphate                          | No data available |
| sodium carboxymethyl cellulose           | No data available |
| subtilisin                               | 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 <sub>50</sub> | 300          | <i>Lepomis macrochirus</i> | Method not given | 96                |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | LC <sub>50</sub> | > 1-10       | <i>Brachydanio rerio</i>   | Method not given | 96                |
| sodium sulphate                          | LC <sub>50</sub> | 81 - 1100    | <i>Fish</i>                | Method not given | 96                |

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|                                |                  |       |  |                   |    |
|--------------------------------|------------------|-------|--|-------------------|----|
| sodium carboxymethyl cellulose | LC <sub>50</sub> | > 100 | <i>Lepomis macrochirus</i><br><i>Oncorhynchus mykiss</i> | Method not given  | 96 |
| subtilisin                     | LC <sub>50</sub> | 8.2   | <i>Fish</i>  | OECD 203 (EU C.1) | 96 |

## Aquatic short-term toxicity - crustacea

| Ingredient(s)                            | Endpoint         | Value (mg/l) | Species                     | Method            | Exposure time (h) |
|--|------------------|--------------|-----------------------------|-------------------|-------------------|
| sodium carbonate                         | EC <sub>50</sub> | 200-227      | <i>Ceriodaphnia dubia</i>   | Method not given  | 96                |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | EC <sub>50</sub> | > 1-10       | <i>Daphnia magna Straus</i> | Method not given  | 48                |
| sodium sulphate                          | EC <sub>50</sub> | 4580         | <i>Daphnia magna Straus</i> | Method not given  | 48                |
| sodium carboxymethyl cellulose           | EC <sub>50</sub> | > 1000       | <i>Daphnia</i>              | Method not given  |                   |
| subtilisin                               | EC <sub>50</sub> | 0.586        | <i>Daphnia</i>              | OECD 202 (EU C.2) | 48                |

## Aquatic short-term toxicity - algae

| Ingredient(s)                            | Endpoint                       | Value (mg/l)      | Species                          | Method             | Exposure time (h) |
|--|--------------------------------|-------------------|----------------------------------|--------------------|-------------------|
| sodium carbonate                         | EC <sub>50</sub>               | > 800             | <i>Selenastrum capricornutum</i> |                    | 72                |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | EC <sub>50</sub>               | > 1-10            | <i>Desmodesmus subspicatus</i>   | Method not given   | 72                |
| sodium sulphate                          | EC <sub>50</sub>               | 1900              |                                  | Non guideline test | 120               |
| sodium carboxymethyl cellulose           |                                | No data available |                                  |                    |                   |
| subtilisin                               | E <sub>r</sub> C <sub>50</sub> | 0.830             | <i>Not specified</i>             | OECD 201 (EU C.3)  | 72                |

## Aquatic short-term toxicity - marine species

| Ingredient(s)                            | Endpoint | Value (mg/l)      | Species | Method | Exposure time (days) |
|--|----------|-------------------|---------|--------|----------------------|
| sodium carbonate                         |          | No data available |         |        |                      |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          | No data available |         |        |                      |
| sodium sulphate                          |          | No data available |         |        |                      |
| sodium carboxymethyl cellulose           |          | No data available |         |        |                      |
| subtilisin                               |          | 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 |                         |                  |               |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | EC <sub>50</sub> | 140               | <i>Activated sludge</i> | Method not given |               |
| sodium sulphate                          |                  | No data available |                         |                  |               |
| sodium carboxymethyl cellulose           |                  | No data available |                         |                  |               |
| subtilisin                               |                  | 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 |         |        |               |                  |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          | No data available |         |        |               |                  |
| sodium sulphate                          |          | No data available |         |        |               |                  |
| sodium carboxymethyl cellulose           |          | No data available |         |        |               |                  |
| subtilisin                               |          | No data available |         |        |               |                  |

## Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---------------|----------|--------------|---------|--------|---------------|------------------|
|---------------|----------|--------------|---------|--------|---------------|------------------|

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|  |                  |                   |                    |          |  |  |
|--|------------------|-------------------|--------------------|----------|--|--|
| sodium carbonate                         |                  | No data available |                    |          |  |  |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | EC <sub>10</sub> | > 0.1-1           | <i>Daphnia sp.</i> | OECD 211 |  |  |
| sodium sulphate                          |                  | No data available |                    |          |  |  |
| sodium carboxymethyl cellulose           |                  | No data available |                    |          |  |  |
| subtilisin                               |                  | 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         |         |        |                      |                  |
| Alcohols, C10-16, ethoxylated (7-<15 EO) |          | No data available         |         |        |                      |                  |
| sodium sulphate                          |          | No data available         |         |        |                      |                  |
| sodium carboxymethyl cellulose           |          | No data available         |         |        |                      |                  |
| subtilisin                               |          | 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 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 |        |            |        |

Abiotic degradation - hydrolysis, if available:

| Ingredient(s)    | Half-life time in fresh water | Method | Evaluation           | Remark |
|------------------|-------------------------------|--------|----------------------|--------|
| sodium carbonate | No data available             |        | Rapidly hydrolysible |        |

Abiotic degradation - other processes, if available:

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

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**Biodegradation**

Ready biodegradability - aerobic conditions

| Ingredient(s)                            | Inoculum                 | Analytical method | DT <sub>50</sub>    | Method    | Evaluation                           |
|--|--------------------------|-------------------|---------------------|-----------|--------------------------------------|
| sodium carbonate                         |                          |                   |                     |           | Not applicable (inorganic substance) |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | Activated sludge, aerobe | Method not given  | > 60 % in 28 day(s) | OECD 301B | Readily biodegradable                |
| sodium sulphate                          |                          |                   |                     |           | Not applicable (inorganic substance) |
| sodium carboxymethyl cellulose           |                          | DOC reduction     | 10-30% in 28 day(s) |           | Not readily biodegradable.           |
| subtilisin                               |                          |                   |                     | OECD 301B | Readily biodegradable                |

Ready biodegradability - anaerobic and marine conditions, if available:

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

Degradation in relevant environmental compartments, if available:

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

**12.3 Bioaccumulative potential**

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s)                            | Value             | Method           | Evaluation                  | Remark |
|--|-------------------|------------------|-----------------------------|--------|
| sodium carbonate                         | No data available |                  | No bioaccumulation expected |        |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | 3.55              | QSAR             | No bioaccumulation expected |        |
| sodium sulphate                          | -4.38             | Method not given | No bioaccumulation expected |        |
| sodium carboxymethyl cellulose           | No data available |                  |                             |        |
| subtilisin                               | < 0               |                  |                             |        |

Bioconcentration factor (BCF)

| Ingredient(s)                            | Value             | Species | Method | Evaluation                           | Remark |
|--|-------------------|---------|--------|--------------------------------------|--------|
| sodium carbonate                         | No data available |         |        | No bioaccumulation expected          |        |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available |         |        |                                      |        |
| sodium sulphate                          | No data available |         |        |                                      |        |
| sodium carboxymethyl cellulose           | No data available |         |        |                                      |        |
| subtilisin                               | -                 |         |        | Not relevant, does not bioaccumulate |        |

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

| Ingredient(s)                            | Adsorption coefficient Log K <sub>oc</sub> | Desorption coefficient Log K <sub>oc</sub> (des) | Method | Soil/sediment type | Evaluation                                       |
|--|--|--|--------|--------------------|--|
| sodium carbonate                         | No data available                          |  |        |                    | Potential for mobility in soil, soluble in water |
| Alcohols, C10-16, ethoxylated (7-<15 EO) | No data available                          |  |        |                    |  |
| sodium sulphate                          | No data available                          |  |        |                    | Potential for mobility in soil, soluble in water |
| sodium carboxymethyl cellulose           | No data available                          |  |        |                    |  |
| subtilisin                               | 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**

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

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**products:** or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**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

#### EU regulations:

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation
- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- 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 EC Detergents Regulation 648/2004

|                       |         |
|-----------------------|---------|
| phosphates            | >= 30 % |
| non-ionic surfactants | < 5 %   |
| enzymes               |         |

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

**Seveso - 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*

**SDS code:** MSDS7983

**Version:** 05.2

**Revision:** 2024-08-09

#### Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 8, 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.

**Clax Revoflow Pro Micro Pur-Eco 30X2****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
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

**End of Safety Data Sheet**