

## **Safety Data Sheet**

According to Regulation (EC) No 1907/2006

### Sun Professional All in 1 Eco Tablets

Revision: 2014-03-16 *Version: 02* 

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

#### 1.1 Product identifier

**Trade name:** Sun Professional All in 1 Eco Tablets Sun is a registered trade mark and is used under licence of Unilever

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

Identified uses:

For professional use only.

AISE-P203 - Dishwash product. Semi-automatic process

Uses advised against: Uses other than those identified are not recommended

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

Diversey Ltd

#### **Contact details**

Weston Favell Centre, Northampton NN3 8PD, United Kingdom Tel: 01604 405311, Fax: 01604 406809 Regulatory Email: MSDSinfoUK@sealedair.com

#### 1.4 Emergency telephone number

For medical or environmental emergency only: call 0800 052 0185

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

### Indication of danger

Xi - Irritant

### Risk phrases:

R41 - Risk of serious damage to eyes.

### 2.2 Label elements



Xi - Irritant

### Risk phrases:

R41 - Risk of serious damage to eyes.

### Safety phrases:

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 - Wear eye/face protection.

### 2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII

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

### 3.2 Mixtures

| Ingredient(s)       | EC number | CAS number | REACH number      | Classification           | Classification<br>(EC) 1272/2008                              | Notes | Weight percent |
|---------------------|-----------|------------|-------------------|--------------------------|---|-------|----------------|
| sodium carbonate    | 207-838-8 | 497-19-8   | 01-2119485498-19  | Xi;R36                   | Eye Irrit. 2 (H319)   |       | 30-50          |
| sodium percarbonate | 239-707-6 | 15630-89-4 | 01-2119457268-30  | O;R8<br>Xn;R22<br>Xi;R41 | Eye Dam. 1 (H318)<br>Ox. Sol. 3 (H272)<br>Acute Tox. 4 (H302) |       | 10-20          |
| disodium disilicate | 237-623-4 | 13870-28-5 | No data available | Xi;R37/38-41             | Eye Dam. 1 (H318)<br>STOT SE 3 (H335)<br>Skin Irrit. 2 (H315) |       | 1-3            |

<sup>\*</sup> Polymer

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

- Workplace exposure limit(s), if available, are listed in subsection 8.1.
  [1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included
- for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.
- [2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
- [3] Exempted: Annex V of Regulation (EC) No 1907/2006
- [4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

Inhalation Remove from source of exposure. Get medical attention.

Skin contact: Not required under normal use. Rinse with plenty of water. If irritation develops get medical

Eye contact: Wash off immediately with plenty of water. Get medical attention immediately.

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention. Ingestion:

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: Causes irritation.

Skin contact: Unlikely to be irritant in normal use.

Eye contact: Causes severe irritation. Ingestion: Causes irritation. Sensitisation: No known effects.

### 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

### 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.

### 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

### Advice on safe handling:

Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

### Prevention of fire and explosion:

No special precautions required.

# 7.2 Conditions for safe storage, including any incompatibilities Requirements for storage rooms / facilities:

In accordance with local and national regulations.

#### Combined storage in storage rooms / facilities:

In accordance with local and national regulations. For incompatible materials see subsection 10.5.

### **Basic storage conditions**

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

### 7.3 Specific end use(s)

No specific advice for end use available.

### SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

#### **DNEL/DMEL and PNEC values**

**Human exposure** 

DNEL oral exposure - Consumer (mg/kg bw)

| '    | ngredient(s)     | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|------|------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| SO   | dium carbonate   | No data available          | No data available             | No data available         | No data available            |
| sodi | um percarbonate  | No data available          | No data available             | No data available         | No data available            |
| dis  | odium disilicate | No data available          | No data available             | No data available         | No data available            |

DNEL 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            | No data available     | No data available            | No data available    |
| sodium percarbonate | 12.8 mg/cm <sup>2</sup> skin | No data available     | 12.8 mg/cm <sup>2</sup> skin | No data available    |
| disodium disilicate | No data available            | No data available     | No data available            | No data available    |

DNEL dermal exposure - Consumer

| DIVEL definal exposure - Consumer | NEE definial exposure Consumer |                       |                             |                      |  |
|-----------------------------------|--------------------------------|-----------------------|-----------------------------|----------------------|--|
| Ingredient(s)                     |                                | Short term - Systemic | •                           | Long term - Systemic |  |
|                                   | effects                        | effects (mg/kg bw)    | effects                     | effects (mg/kg bw)   |  |
| sodium carbonate                  | No data available              | No data available     | No data available           | No data available    |  |
| sodium percarbonate               | 6.4 mg/cm <sup>2</sup> skin    | No data available     | 6.4 mg/cm <sup>2</sup> skin | No data available    |  |
| disodium disilicate               | No data available              | No data available     | No data available           | No data available    |  |

DNEL inhalatory exposure - Worker (mg/m³)

| DIVEL IIII alatory exposure - Worker (mg/m²) |                            |                               |                           |                              |
|--|----------------------------|-------------------------------|---------------------------|------------------------------|
| Ingredient(s)                                | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
| sodium carbonate                             | No data available          | No data available             | 10                        | No data available            |
| sodium percarbonate                          | No data available          | No data available             | 5                         | No data available            |
| disodium disilicate                          | No data available          | No data available             | No data available         | No data available            |

DNEL 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                         | No data available             | No data available         | No data available            |
| sodium percarbonate | No data available          | No data available             | No data available         | No data available            |
| disodium disilicate | No data available          | No data available             | No data available         | No data available            |

### **Environmental exposure**

Environmental exposure - PNEC

| Ingredient(s)       | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|---------------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| sodium carbonate    | No data available           | No data available            | No data available   | No data available             |
| sodium percarbonate | 0.035                       | 0.035                        | 0.035               | 16.24                         |
| disodium disilicate | No data available           | No data available            | No data available   | No data available             |

Environmental exposure - PNEC, continued

| Environmental exposure - PNEC, continued |                              |                             |                   |                   |  |
|--|------------------------------|-----------------------------|-------------------|-------------------|--|
| Ingredient(s)                            | Sediment, freshwater (mg/kg) | Sediment, marine<br>(mg/kg) | Soil (mg/kg)      | Air (mg/m³)       |  |
| sodium carbonate                         | No data available            | No data available           | No data available | No data available |  |

| sodium percarbonate | No data available | No data available | No data available | No data available |
|---------------------|-------------------|-------------------|-------------------|-------------------|
| disodium disilicate | No data available | No data available | No data available | No data available |

#### 8.2 Exposure controls

### General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Avoid contact with eyes.

The following information applies for the uses indicated in subsection 1.2.

If available, please refer to the product information sheet for application and handling instructions.

Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: The product is intended to be used in closed systems.

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

Personal protective equipment

Safety glasses or goggles (EN 166). Eye / face protection:

Hand protection: No special requirements under normal use conditions. **Body protection:** No special requirements under normal use conditions. Respiratory protection: No special requirements under normal use conditions.

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

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

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

Method / remark

Physical State: Solid Appearance: Tablets Colour: White
Odour: Product specific

Odour threshold: Not applicable

pH:

**Dilution pH:** ≈ 11 (1%)

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

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

Substance data, boiling point

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

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not determined Evaporation rate: Not determined Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

| Ingredient(s)       | Value<br>(Pa)     | Method | Temperature<br>(°C) |
|---------------------|-------------------|--------|---------------------|
| sodium carbonate    | Negligible        |        |                     |
| sodium percarbonate | Negligible        |        |                     |
| disodium disilicate | No data available |        |                     |

Method / remark

Vapour density: Not determined Relative density: Not determined

Solubility in / Miscibility with Water: Soluble

Substance data, solubility in water

| Ingredient(s)       | Value<br>(g/l)    | Method           | Temperature<br>(°C) |
|---------------------|-------------------|------------------|---------------------|
| sodium carbonate    | 210-215           | Method not given | 20                  |
| sodium percarbonate | 140               | Method not given | 20                  |
| disodium disilicate | No data available |                  |                     |

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

Method / remark

Autoignition temperature: Not determined Decomposition temperature: Not determined

Viscosity: Not determined

**Explosive properties:** Not explosive. **Oxidising properties:** Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined

Corrosion to metals

(according to IMDG/ADR regulation): Not determined

Substance data, dissociation constant, if available:

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal storage and use conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

### 10.4 Conditions to avoid

None known under normal storage and use conditions.

### 10.5 Incompatible materials

Reacts with acids.

### 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### Mixtures

No test data is available on the mixture

Substance data, where relevant and available, are listed below.

### Acute toxicity

Acute oral toxicity

| Ingredient(s)       | Endpoint | Value<br>(mg/kg)     | Species | Method           | Exposure time (h) |
|---------------------|----------|----------------------|---------|------------------|-------------------|
| sodium carbonate    | LD 50    | 2800                 | Rat     | Method not given |                   |
| sodium percarbonate | LD 50    | 1034                 | Rat     | Method not given |                   |
| disodium disilicate |          | No data<br>available |         |                  |                   |

Acute dermal toxicity

| Ingredient(s)       | Endpoint | Value<br>(mg/kg)     | Species | Method            | Exposure time (h) |
|---------------------|----------|----------------------|---------|-------------------|-------------------|
| sodium carbonate    | LD 50    | > 2000               | Rabbit  | Method not given  |                   |
| sodium percarbonate | LD 50    | > 2000               | Rabbit  | OECD 402 (EU B.3) |                   |
| disodium disilicate |          | No data<br>available |         |                   |                   |

Acute inhalative toxicity

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species | Method            | Exposure time (h) |
|---------------------|----------|----------------------|---------|-------------------|-------------------|
| sodium carbonate    | LC 50    | 2.3 (dust)           | Rat     | OECD 403 (EU B.2) | 2                 |
| sodium percarbonate |          | No data<br>available |         |                   |                   |
| disodium disilicate |          | No data<br>available |         |                   |                   |

### Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s)       | Result            | Species | Method           | Exposure time |
|---------------------|-------------------|---------|------------------|---------------|
| sodium carbonate    | Not irritant      | Rabbit  | Method not given |               |
| sodium percarbonate | Not irritant      | Rabbit  | Method not given |               |
| disodium disilicate | No data available |         |                  |               |

Eye irritation and corrosivity

| Ingredient(s)       | Result            | Species | Method           | Exposure time |
|---------------------|-------------------|---------|------------------|---------------|
| sodium carbonate    | Irritant          | Rabbit  | Method not given |               |
| sodium percarbonate | Severe damage     | Rabbit  | EPA OPP 81-4     |               |
| disodium disilicate | No data available |         |                  |               |

Respiratory tract irritation and corrosivity

| Ingredient(s)       | Result                             | Species | Method           | Exposure time |
|---------------------|------------------------------------|---------|------------------|---------------|
| sodium carbonate    | No data available                  |         |                  |               |
| sodium percarbonate | Irritating to<br>respiratory tract | Mouse   | Method not given |               |
| disodium disilicate | No data available                  |         |                  |               |

### Sensitisation

Sensitisation by skin contact

| Scholisation 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) /<br>Buehler test |                   |
| disodium disilicate          | No data available |            |                                     |                   |

Sensitisation by inhalation

| Ingredient(s)       | Result            | Species | Method | Exposure time |
|---------------------|-------------------|---------|--------|---------------|
| sodium carbonate    | No data available |         |        |               |
| sodium percarbonate | No data available |         |        |               |
| disodium disilicate | No data available |         |        |               |

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

| Ingredient(s)       | Endpoint | Value<br>(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<br>available  |         |        |                      |                                      |

Sub-chronic dermal toxicity

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

Sub-chronic inhalation toxicity

| Ingredient(s)       | Endpoint | Value<br>(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     |         |        |                      |                                      |

Chronic toxicity

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available:

Carcinogenicity

| Ingredient(s)       | Effect  |
|---------------------|---|
| sodium carbonate    | No evidence for carcinogenicity, weight-of-evidence |
| sodium percarbonate | No data available                                   |
| disodium disilicate | No data available                                   |

Mutagenicity

| Ingredient(s)       | Result (in-vitro) | Method<br>(in-vitro) | Result (in-vivo)  | Method<br>(in-vivo) |
|---------------------|-------------------|----------------------|-------------------|---------------------|
| sodium carbonate    | No data available |                      | No data available |                     |
| sodium percarbonate | No data available |                      | No data available |                     |
| disodium disilicate | No data available |                      | No data available |                     |

Toxicity for reproduction

| Ingredient(s)       | Endpoint | Specific effect | Value<br>(mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|---------------------|----------|-----------------|-----------------------|---------|--------|---------------|------------------------------------|
| sodium carbonate    |          |                 | No data<br>available  |         |        |               |                                    |
| sodium percarbonate |          |                 | No data<br>available  |         |        |               |                                    |
| disodium disilicate |          |                 | No data<br>available  |         |        |               |                                    |

### Potential adverse health effects and symptoms

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

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Mixtures

No test 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<br>(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 |          | No data<br>available |                     |                  |                   |

Aquatic short-term toxicity - crustacea

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species                 | Method           | Exposure time (h) |
|---------------------|----------|----------------------|-------------------------|------------------|-------------------|
| sodium carbonate    | EC 50    | 265                  | Daphnia<br>magna Straus | Method not given | 96                |
| sodium percarbonate | EC 50    | 4.9                  | Daphnia pulex           | Method not given | 48                |
| disodium disilicate |          | No data<br>available |                         |                  |                   |

Aquatic short-term toxicity - algae

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species | Method | Exposure time (h) |
|---------------------|----------|----------------------|---------|--------|-------------------|
| sodium carbonate    |          | No data<br>available |         |        |                   |
| sodium percarbonate |          | No data<br>available |         |        |                   |
| disodium disilicate |          | No data<br>available |         |        |                   |

Aquatic short-term toxicity - marine species

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species | Method | Exposure time (days) |
|---------------------|----------|----------------------|---------|--------|----------------------|
| sodium carbonate    |          | No data<br>available |         |        |                      |
| sodium percarbonate |          | No data<br>available |         |        |                      |
| disodium disilicate |          | No data<br>available |         |        |                      |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Inoculum         | Method   | Exposure time |
|---------------------|----------|----------------------|------------------|----------|---------------|
| sodium carbonate    |          | No data<br>available |                  |          |               |
| sodium percarbonate | EC 50    | 466                  | Activated sludge | OECD 209 | 0.5 hour(s)   |
| disodium disilicate |          | No data<br>available |                  |          |               |

### **Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species             | Method           | Exposure time | Effects observed |
|---------------------|----------|----------------------|---------------------|------------------|---------------|------------------|
| sodium carbonate    |          | No data<br>available |                     |                  |               |                  |
| sodium percarbonate | NOEC     | 7.4                  | Pimephales promelas | Method not given | 96 hour(s)    |                  |
| disodium disilicate |          | No data<br>available |                     |                  |               |                  |

Aquatic long-term toxicity - crustacea

| Ingredient(s)       | Endpoint | Value<br>(mg/l)      | Species       | Method           | Exposure time | Effects observed |
|---------------------|----------|----------------------|---------------|------------------|---------------|------------------|
| sodium carbonate    |          | No data<br>available |               |                  |               |                  |
| sodium percarbonate | NOEC     | 2                    | Daphnia pulex | Method not given | 48 hour(s)    |                  |
| disodium disilicate |          | No data<br>available |               |                  |               |                  |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s)       | Endpoint | Value<br>(mg/kg dw<br>sediment) | Species | Method | Exposure time (days) | Effects observed |
|---------------------|----------|---------------------------------|---------|--------|----------------------|------------------|
| sodium carbonate    |          | No data available               |         |        |                      |                  |
| sodium percarbonate |          | No data<br>available            |         |        |                      |                  |
| disodium disilicate |          | No data<br>available            |         |        |                      |                  |

### **Terrestrial toxicity**

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

### 12.2 Persistence and degradability

### Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

| Ingredient(s)       | Half-life time | Method           | Evaluation | Remark |
|---------------------|----------------|------------------|------------|--------|
| sodium percarbonate | NA             | Method not given |            |        |

Abiotic degradation - hydrolysis, if available:

|   | Ingredient(s)       | Half-life time in fresh water | Method           | Evaluation           | Remark |
|---|---------------------|-------------------------------|------------------|----------------------|--------|
| Γ | sodium carbonate    | No data available             |                  | Rapidly hydrolysible |        |
| Г | sodium percarbonate | < 1 day(s)                    | Method not given | Hydrolysible         |        |

Abiotic degradation - other processes, if 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 |          |                   |       |        | No data available                    |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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

#### 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredier    | t(s)    | Value             | Method | Evaluation                  | Remark |
|--------------|---------|-------------------|--------|-----------------------------|--------|
| sodium carb  | onate   | No data available |        | No bioaccumulation expected |        |
| sodium perca | rbonate | No data available |        |                             |        |
| disodium dis | ilicate | No data available |        |                             |        |

Bioconcentration factor (BCF)

| Ingredient(s)       | Value             | Species | Method | Evaluation                  | Remark |
|---------------------|-------------------|---------|--------|-----------------------------|--------|
| sodium carbonate    | No data available |         |        | No bioaccumulation expected |        |
| sodium percarbonate | No data available |         |        |                             |        |
| disodium disilicate | No data available |         |        |                             |        |

#### 12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s)       | Adsorption<br>coefficient<br>Log Koc | Desorption<br>coefficient<br>Log Koc(des) | Method | Soil/sediment<br>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                    |   |        |                       |  |

#### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

#### 12.6 Other adverse effects

No other adverse effects known.

### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Waste from residues / unused

products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging

material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:** 20 01 29\* - detergents containing dangerous substances.

**Empty packaging** 

**Recommendation:** Dispose of observing national or local regulations.

### **SECTION 14: Transport information**

### ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: Non-dangerous goods

**14.2 UN proper shipping name:** Non-dangerous goods **14.3 Transport hazard class(es):** Non-dangerous goods

Class: -

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

### SECTION 15: Regulatory information

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

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

### Ingredients according to EC Detergents Regulation 648/2004

oxygen-based bleaching agents non-ionic surfactants, polycarboxylates enzymes 5 - 15% < 5%

### 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

MSDS code: MS1000972 Version: 02 Revision: 2014-03-16

### Reason for revision:

Name change

### Full text of the R, H and EUH phrases mentioned in section 3:

- R36 Irritating to eyes.
  R 8 Contact with combustible material may cause fire.
  R41 Risk of serious damage to eyes.
- R22 Harmful if swallowed.
- R37/38 Irritating to respiratory system and skin.
- 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.

### Abbreviations and acronyms:

- · AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit

- EUH CLP Specific hazard statement
   PBT Persistent, Bioaccumulative and Toxic
   PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative

**End of Safety Data Sheet**