PRODUCT SAFETY DATA SHEET



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

1.1 Product identifier

STERADENT Active Fresh

SDS number: D8002989

Code: 0301841

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

Dental Products

Consumer use

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

RB UK Commercial Ltd Wellcroft House Wellcroft Road

Slough, Berkshire SL1 4AQ

The Republic Of Ireland:

RB Ireland Hygiene Home Commercial Ltd 7 Riverwalk Citywest Business Campus Dublin 24 Ireland

1.4 Emergency telephone number

RB UK Contact Telephone: 0333 2005 345 9 am - 5 pm weekdays **RB ROI Contact Telephone**: 01 6305429 9 am - 5 pm weekdays

RB email: consumer.relations-hcukroi@rb.com

Poisons Information Centre of Ireland: 01 809 2166 8am-10pm 7 days a week.

Additional useful information

Reason of Revision: New SDS

Revision date and number: 24/03/2023 v3

Supersedes: v2

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms

(!)

Signal word : Warning

Hazard statements : Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

Precautionary statements

General: If medical advice is needed, have product container or label at hand. Keep out of

reach of children.

Prevention: Wash hands thoroughly after handling. Do not ingest.

Response : IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF IN

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

If eye irritation persists: If eye irritation persists, get medical advice/attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazardous ingredients : pentapotassium bis(peroxymonosulphate) bis(sulphate)

SODIUM CARBONATE PEROXIDE

SODIUM DODECYLBENZENESULFONATE

Supplemental label

elements

: ContainsPotassium Persulfate and Eucalyptol. May produce an allergic reaction.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger: Yes, applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

 This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do

: None known.

not result in classification

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Туре |
|--|---|-----------|---|---|------|
| pentapotassium bis (peroxymonosulphate) bis (sulphate) | REACH #: 01-2119485567-22 EC: 274-778-7 CAS: 70693-62-8 | ≥10 - ≤25 | Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412 | ATE [Oral] = 500 mg/kg ATE [Dermal] = 2000 mg/kg ATE [Inhalation (dusts and mists)] = 1.85 mg/l | [1] |
| CITRIC ACID | REACH #: 01-2119457026-42 EC: 201-069-1 CAS: 77-92-9 | ≥10 - ≤25 | Eye Irrit. 2, H319 STOT SE 3, H335 | - | [1] |
| SODIUM CARBONATE | REACH #: 01-2119485498-19 EC: 207-838-8 CAS: 497-19-8 Index: 011-005-00-2 | ≥10 - ≤25 | Eye Irrit. 2, H319 | - | [1] |
| SODIUM CARBONATE PEROXIDE | REACH #: 01-2119457268-30 EC: 239-707-6 CAS: 15630-89-4 | ≥10 - ≤25 | Ox. Sol. 3, H272 Acute Tox. 4, H302 Eye Dam. 1, H318 | Ox. Sol. 3, H272: C ≥ 25% ATE [Oral] = 1034 mg/kg Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 7.5% ≤ C < 25% | [1] |
| I-Malic acid | EC: 230-022-8 CAS: 6915-15-7 | ≤5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 | - | [1] |
| SODIUM DODECYLBENZENESULFONATE | REACH #: 01-2120088038-51 EC: 246-680-4 CAS: 25155-30-0 | ≤3 | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 See Section 16 for | ATE [Oral] = 1080 mg/kg | [1] |
| | | | the full text of the H statements declared above. | | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SECTION 4: First aid measures

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : /

: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing: None known.

media

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: No specific fire or explosion hazard.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides

SECTION 5: Firefighting measures

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage

Store between the following temperatures: 5 to 25°C (41 to 77°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Dental Products

Consumer use

Industrial sector specific

: Not available.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|------------------------------------|------|---------------------------------------|------------------------------|--------------------------------|----------|
| pentapotassium bis | DNEL | Long term | 0.28 mg/m ³ | Workers | Systemic |
| (peroxymonosulphate) bis(sulphate) | DNEL | Inhalation Short term | 50 mg/m³ | Workers | Systemic |
| | DNEL | Inhalation Long term Inhalation | 0.28 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 50 mg/m³ | Workers | Local |
| | DNEL | Long term Dermal | 20 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 80 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 0.449 mg/ cm ² | Workers | Local |
| | DNEL | Long term Inhalation | 0.14 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Short term Inhalation | 25 mg/m³ | General population [Consumers] | Systemic |
| | DNEL | Long term Inhalation | 6.14 mg/m³ | General population [Consumers] | Local |
| | DNEL | Short term Inhalation | 25 mg/m³ | General population [Consumers] | Local |
| | DNEL | Long term Dermal | 10 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Short term Inhalation | 40 mg/kg bw/day | General population [Consumers] | Systemic |
| | DNEL | Short term Dermal | 0.22 mg/ cm ² | General population [Consumers] | Local |
| | DNEL | Long term Oral | 10 mg/kg | General | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|---------------------------|--------------|---------------------------------|------------------------------|---------------------------|------------|
| | | | bw/day | population [Consumers] | |
| | DNEL | Short term Oral | 10 mg/kg | General | Systemic |
| | DIVLL | Official Crai | bw/day | population | Oysternic |
| | | | bwiday | [Consumers] | |
| | DNEL | Long term | 0.14 mg/m ³ | General | Local |
| | D. 122 | Inhalation | 0 | population | Local |
| | DNEL | Long term | 0.14 mg/m ³ | | Systemic |
| | | Inhalation | | population | - , |
| | DNEL | Short term Dermal | 0.22 mg/ | General | Local |
| | | | cm² | population | |
| | DNEL | Long term Inhalation | 0.28 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 0.28 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Dermal | 0.449 mg/ cm ² | Workers | Local |
| | DNEL | Short term Oral | 10 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 10 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 10 mg/kg | General | Systemic |
| | , | | bw/day | population | - , |
| | DNEL | Long term Dermal | 20 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term | 25 mg/m ³ | General | Local |
| | | Inhalation | | population | |
| | DNEL | Short term | 25 mg/m³ | General | Systemic |
| | | Inhalation | G | population | |
| | DNEL | Short term Dermal | 40 mg/kg | General | Systemic |
| | | | bw/day | population | |
| | DNEL | Short term | 50 mg/m ³ | Workers | Local |
| | | Inhalation | | | |
| | DNEL | Short term | 50 mg/m ³ | Workers | Systemic |
| | DNEL | Inhalation Short term Dermal | 80 mg/kg | Workers | Systemic |
| CODUINA CADRONATE | DAIEL | 1 4 | bw/day | 0 | 1 1 |
| SODIUM CARBONATE | DNEL | Long term | 10 mg/m³ | General | Local |
| | DNIEL | Inhalation | 40 / 3 | population | Lassi |
| | DNEL | Short term Inhalation | 10 mg/m³ | General | Local |
| | DNEL | Long term | 10 mg/m³ | population Workers | Local |
| | DINEL | Inhalation | 10 mg/m | 44 OLIGI 9 | Local |
| SODIUM CARBONATE PEROXIDE | DNEL | Short term | 5 mg/m³ | Workers | Local |
| | חאבי | Inhalation | Emales | Morkers | Local |
| | DNEL | Long term Inhalation | 5 mg/m³ | Workers | Local |
| | DNEL | Short term Dermal | 6.4 mg/cm ² | General population | Local |
| | DNEL | Long term Dermal | 6.4 mg/cm ² | General population | Local |
| | DNEL | Short term Dermal | 12.8 mg/ cm² | Workers | Local |
| | DNEL | Long term Dermal | 12.8 mg/ cm ² | Workers | Local |
| I-Malic acid | DNEL | Long term Oral | 2.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 5.2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 9 mg/m³ | General population | Systemic |
| | | • | • | | · |

SECTION 8: Exposure controls/personal protection

| | DNEL | Long term Inhalation | 36.6 mg/m ³ | Workers | Systemic |
|-----------------------------------|------|--------------------------|------------------------------|-----------------------|----------|
| SODIUM DODECYLBENZENESULFONATE | DNEL | Short term Dermal | 0.787 mg/ cm ² | General population | Local |
| | DNEL | Long term Dermal | 0.787 mg/ cm ² | General population | Local |
| | DNEL | Short term Dermal | 1.57 mg/ cm² | Workers | Local |
| | DNEL | Long term Dermal | 1.57 mg/ cm ² | Workers | Local |
| | DNEL | Short term Oral | 13 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 13 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 26 mg/m³ | General population | Local |
| | DNEL | Long term Inhalation | 26 mg/m³ | General population | Local |
| | DNEL | Short term Inhalation | 26 mg/m³ | General population | Systemic |
| | DNEL | Long term Inhalation | 26 mg/m³ | General population | Systemic |
| | DNEL | Long term Dermal | 28.6 mg/ kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 40 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 52 mg/m³ | Workers | Local |
| | DNEL | Long term Inhalation | 52 mg/m³ | Workers | Local |
| | DNEL | Short term Inhalation | 52 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 52 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 57.2 mg/ kg bw/day | Workers | Systemic |
| | DNEL | Short term Dermal | 80 mg/kg bw/day | Workers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|--|---------------------------|-----------------|--------------------------|
| pentapotassium bis(peroxymonosulphate) bis(sulphate) | Fresh water | 0.022 mg/l | Assessment Factors |
| | Marine water | 0.002 mg/l | Assessment Factors |
| | Sewage Treatment Plant | 108 mg/l | Assessment Factors |
| | Fresh water sediment | 0.078 mg/kg dwt | Equilibrium Partitioning |
| | Marine water sediment | 0.008 mg/kg dwt | Equilibrium Partitioning |
| | Soil | 1 mg/kg dwt | Assessment Factors |
| CITRIC ACID | Fresh water | 440 mg/l | - |
| | Fresh water sediment | 34.6 mg/kg | - |
| | Marine water sediment | 3.46 mg/kg | - |
| | Soil | 33.1 mg/kg | - |
| SODIUM CARBONATE PEROXIDE | Sewage Treatment Plant | 16.24 mg/l | Assessment Factors |
| | Fresh water | 0.035 mg/l | Assessment Factors |
| | Marine water | 0.035 mg/l | Assessment Factors |

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

SECTION 8: Exposure controls/personal protection

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection Hand protection

: EN 16523-1:2015

Tested for protection against chemical permeation. Low chemical resistant or waterproof gloves. (EN 16523-1:2015 supersedes EN 374-3:2003)

EN 374-2:2003

Tested for protection against liquid penetration and micro-organisms.

EN 388:2003

Tested for protection against mechanical risks (abrasion, blade cut resistance, tear resistance and puncture resistance).

ISO 374-1:2016/Type A

Protective glove with permeation resistance of at least 30 minutes each for at least 6 test chemicals.

ISO 374-1:2016/Type B

Protective glove with permeation resistance of at least 30 minutes each for at least 3 test chemicals.

ISO 374-1:2016/Type C

Protective glove with permeation resistance of at least 10 minutes for at least 1 test chemical.

Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid. [Tablet.]
Color : Green. [Light]
Odor : Menthol-like.

SECTION 9: Physical and chemical properties

Odor threshold

Melting point/freezing point

Initial boiling point and boiling range

: Not relevant/applicable due to nature of the product.

: Not relevant/applicable due to nature of the product.

: Not relevant/applicable due to nature of the product.

Flammability (solid, gas)

Upper/lower flammability or

explosive limits

: Not relevant/applicable due to nature of the product.

: Not relevant/applicable due to nature of the product.

: Closed cup: Not applicable. Flash point

Auto-ignition temperature

Decomposition temperature pН

Viscosity

Not relevant/applicable due to nature of the product. : Not relevant/applicable due to nature of the product.

: 6 to 8 [Conc. (% w/w): 2%]

: Not relevant/applicable due to nature of the product.

Solubility(ies)

| Media | Result |
|------------|----------------|
| cold water | Easily soluble |
| hot water | Easily soluble |

Partition coefficient: n-octanol/

water

: Not relevant/applicable due to nature of the product.

: Not relevant/applicable due to nature of the product. Vapor pressure : Not relevant/applicable due to nature of the product. Vapor density

Particle characteristics

Median particle size : > 10 µm

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 **Acute toxicity**

SECTION 11: Toxicological information

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|---------------------------------|-----------------------|-------------|----------|
| pentapotassium bis (peroxymonosulphate) bis (sulphate) | LC50 Inhalation Dusts and mists | Rat | 1.85 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 2000 mg/kg | - |
| | LD50 Oral | Rat | 500 mg/kg | - |
| CITRIC ACID | LD50 Oral | Rat | 11700 mg/kg | - |
| SODIUM CARBONATE | LD50 Dermal | Mouse - Female | 2210 mg/kg | - |
| | LD50 Oral | Rat | 2800 mg/kg | - |
| SODIUM CARBONATE PEROXIDE | LD50 Dermal | Rabbit | 2001 mg/kg | - |
| | LD50 Oral | Rat | 1034 mg/kg | - |
| I-Malic acid | LD50 Oral | Rat | 1600 mg/kg | - |
| SODIUM DODECYLBENZENESULFONATE | LD50 Oral | Rat - Male, Female | 1080 mg/kg | - |

Conclusion/Summary

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

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|------------------|-------------------|--------------------------------|----------------------------------|--|
| Denture Cleaning | 500 | N/A | N/A | N/A | N/A |
| Tablets_Fresh_FF0301841_D8002989 EU | | | | | |
| pentapotassium bis(peroxymonosulphate) bis | 500 | 2000 | N/A | N/A | 1.85 |
| (sulphate) | | | | | |
| CITRIC ACID | 11700 | N/A | N/A | N/A | N/A |
| SODIUM CARBONATE | 2800 | 5000 | N/A | N/A | N/A |
| SODIUM CARBONATE PEROXIDE | 1034 | 2001 | N/A | N/A | N/A |
| I-Malic acid | 2500 | N/A | N/A | N/A | N/A |
| SODIUM DODECYLBENZENESULFONATE | 1080 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|---|------------------|--------|-------------------------------------|-------------|
| Denture Cleaning Tablets_Fresh_FF0301841_D8002989 EU | Eyes - Irritant | In vitro | - | - | - |
| | Skin - Irritant | In vitro | - | - | - |
| CITRIC ACID | Eyes - Severe irritant | Rabbit | - | 24 hours 750 | - |
| SODIUM CARBONATE | Eyes - Mild irritant | Rabbit | - | ug 0.5 minutes 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 | - |
| I-Malic acid | Eyes - Severe irritant | Rabbit | - | mg 24 hours 750 ug | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 | - |
| SODIUM DODECYLBENZENESULFONATE | Eyes - Severe irritant | Rabbit | - | mg 1 % | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 250 | - |
| | Eyes - Visible necrosis Skin - Moderate irritant | Rabbit Rabbit | - - | ug 72 hours 24 hours 20 mg | 6 days - |

Conclusion/Summary

Skin

: Causes skin irritation. Bridging principle "Substantially similar mixtures"

Eyes

: Causes serious eye irritation. Bridging principle "Substantially similar mixtures"

SECTION 11: Toxicological information

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

Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|------------|-----------------|
| pentapotassium bis (peroxymonosulphate) bis (sulphate) | skin | Guinea pig | Not sensitizing |

Conclusion/Summary

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

Mutagenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------------------|
| CITRIC ACID | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available.

routes of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

<u>Delayed and immediate effects and also chronic effects from short and long term exposure</u>

<u>Short term exposure</u>

SECTION 11: Toxicological information

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Potential chronic health effects

Not available.

Conclusion/Summary

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

General
Carcinogenicity
Mutagenicity

No known significant effects or critical hazards.No known significant effects or critical hazards.No known significant effects or critical hazards.

Reproductive toxicity

: No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|--|--|--|
| pentapotassium bis (peroxymonosulphate) bis (sulphate) | Acute LC50 >32 mg/l Fresh water | Fish - Brachydanio rerio | 96 hours |
| CITRIC ÁCID | Acute LC50 160000 μg/l Marine water | Crustaceans - Carcinus maenas - Adult | 48 hours |
| SODIUM CARBONATE | Acute EC50 242000 μg/l Fresh water Acute LC50 176000 μg/l Fresh water Acute LC50 265000 μg/l Fresh water Acute LC50 300000 μg/l Fresh water | Algae - Navicula seminulum Crustaceans - Amphipoda Daphnia - Daphnia magna Fish - Lepomis macrochirus | 96 hours 48 hours 48 hours 96 hours |
| SODIUM CARBONATE PEROXIDE | Acute EC50 4.9 mg/l | Daphnia - Daphnia Pulex | 48 hours |
| SODIUM DODECYLBENZENESULFONATE | Acute EC50 29000 μg/l Fresh water | Algae - Chlorella pyrenoidosa - Exponential growth phase | 96 hours |
| | Acute EC50 7.81 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute EC50 5.88 ppm Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 1.18 ppm Fresh water | Fish - Lepomis macrochirus | 96 hours |

Conclusion/Summary

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

12.2 Persistence and degradability

Conclusion/Summary

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

12.3 Bioaccumulative potential

SECTION 12: Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
|--|-----------------------|-------------|-------------------|
| pentapotassium bis (peroxymonosulphate) bis (sulphate) | <0.3 | - | low |
| CITRIC ACID I-Malic acid SODIUM DODECYLBENZENESULFONATE | -1.8 -1.26 1.96 | - - - | low low low |

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Packaging

Methods of disposal

: The classification of the product may meet the criteria for a hazardous waste.

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|------------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |

14.6 Special precautions for

: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : None.

on the manufacture,

placing on the market

and use of certain

dangerous substances,

mixtures and articles

Other EU regulations

Industrial emissions : Listed

(integrated pollution

prevention and control) -

Air

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

SECTION 15: Regulatory information

15.2 Chemical Safety

Assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

 $\label{eq:clp} {\sf CLP = Classification, Labelling and Packaging Regulation (EC) No.}$

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|---------------------|---|
| Acute Tox. 4, H302 | Expert judgment |
| Skin Irrit. 2, H315 | Bridging principle "Substantially similar mixtures" |
| Eye Irrit. 2, H319 | Bridging principle "Substantially similar mixtures" |

Full text of abbreviated H statements

| H272 | May intensify fire; oxidizer. |
|------|--|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
|-------------------|--|
| Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Ox. Sol. 3 | OXIDIZING SOLIDS - Category 3 |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - |
| | Category 3 |

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current knowledge of the product concerned, and is given in good faith. The attention of recipients is drawn to (amongst other things) the element of risk consequent to use of the product other than that for which it was intended.

In no way does this document remove the need of the recipient of the product to fully understand and apply statutory requirements. It is the recipient's sole responsibility to take due precautions relative to the use made of the product. All information contained herein is only to assist the recipient in fulfilling their statutory duty connected with the use of hazardous materials.

This Document may be entitled Product Safety Data Sheet as required by REACH (Registration, Evaluation, Authorisation and restriction of Chemicals) Annex II OR Product Data Information Sheet where a product is not required to be supported by a full REACH compliant SDS (e.g. not classified as hazardous or out of scope, such as cosmetics). Changes from the previous version are given in Section 1.

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