

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

PRODUCT SAFETY DATA SHEET



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

1.1 Product identifier

STERADENT Active Plus

SDS number: D8377075

Code: 0378493 v3.0

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

Denture cleaner tablets.

Consumer uses.

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 : Update

Revision date and number : 31/03/2023 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]

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 : Causes skin irritation.
Causes serious eye irritation.

Precautionary statements

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

Prevention : Wash hands thoroughly after handling.

Response : 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: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER/doctor/if you feel unwell.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not 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 not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
pentapotassium bis (peroxymonosulphate) bis (sulphate)	REACH #: 01-2119485567-22 EC: 274-778-7 CAS: 70693-62-8	≥10 - ≤17	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 - <20	Eye Irrit. 2, H319 STOT SE 3, H335	-	[1]
SODIUM CARBONATE PEROXIDE	REACH #: 01-2119457268-30 EC: 239-707-6 CAS: 15630-89-4	≤13	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]
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]
l-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	≤2	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 1080 mg/kg	[1]

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 adverse health effects persist or are severe. 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 media** : None known.

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** : No specific data.

5.3 Advice for firefighters

SECTION 5: Firefighting measures

- 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.

Do not store above the following temperature: 25 °C

Do not store below the following temperature: 5 °C

7.3 Specific end use(s)

Recommendations : Denture cleaner tablets.
Consumer uses.

Industrial sector specific solutions : Not available.

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 (peroxymonosulphate) bis(sulphate)	DNEL	Long term Inhalation	0.28 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	50 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.28 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	50 mg/m ³	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/m ³	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	25 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	6.14 mg/m ³	General population [Consumers]	Local
	DNEL	Short term Inhalation	25 mg/m ³	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	Local

SECTION 8: Exposure controls/personal protection

SODIUM CARBONATE PEROXIDE	DNEL	Long term Oral	10 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Short term Oral	10 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Inhalation	0.14 mg/m ³	[Consumers] General population	Local
	DNEL	Long term Inhalation	0.14 mg/m ³	General population	Systemic
	DNEL	Short term Dermal	0.22 mg/cm ²	General population	Local
	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 bw/day	General population	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	25 mg/m ³	General population	Local
	DNEL	Short term Inhalation	25 mg/m ³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	50 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	50 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	80 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	5 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	5 mg/m ³	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/cm ²	Workers	Local
	DNEL	Long term Dermal	12.8 mg/cm ²	Workers	Local
SODIUM CARBONATE	DNEL	Long term Inhalation	10 mg/m ³	General population	Local
	DNEL	Short term Inhalation	10 mg/m ³	General population	Local
	DNEL	Long term Inhalation	10 mg/m ³	Workers	Local
l-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

SECTION 8: Exposure controls/personal protection

SODIUM DODECYLBENZENESULFONATE	DNEL	Long term Inhalation	9 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	36.6 mg/m ³	Workers	Systemic
	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/cm ²	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/m ³	General population	Local
	DNEL	Long term Inhalation	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	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/m ³	Workers	Local
	DNEL	Long term Inhalation	52 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	52 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	52 mg/m ³	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
CITRIC ACID	Soil	1 mg/kg dwt	Assessment Factors
	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

SECTION 8: Exposure controls/personal protection

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

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	: White/Turquoise
Odor	: Mint wintergreen.
Odor threshold	: Not determined
Melting point/freezing point	: Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range	: Not available.
Flammability (solid, gas)	: Not determined
Upper/lower flammability or explosive limits	: Not determined
Flash point	: Not relevant/applicable due to nature of the product.
Auto-ignition temperature	: Not relevant/applicable due to nature of the product.
Decomposition temperature	: Not determined
pH	: 6 to 8
Viscosity	: Not determined.
Solubility(ies)	:

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Partition coefficient: n-octanol/ water : Not determined

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

Evaporation rate : Not determined

Relative density : 1 to 1.2

Vapor density : Not determined

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

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 PEROXIDE	LD50 Dermal	Rabbit	2001 mg/kg	-
	LD50 Oral	Rat	1034 mg/kg	-
SODIUM CARBONATE	LD50 Dermal	Mouse - Female	2210 mg/kg	-
	LD50 Oral	Rat	2800 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)
Alkali Denture Cleaner Tablets_FF0378493_D8377075 (EU)	2075.4	11764.7	N/A	N/A	9.5
pentapotassium bis(peroxymonosulphate) bis (sulphate)	500	2000	N/A	N/A	1.85
CITRIC ACID	11700	N/A	N/A	N/A	N/A
SODIUM CARBONATE PEROXIDE	1034	2001	N/A	N/A	N/A
SODIUM CARBONATE	2800	5000	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
Alkali Denture Cleaner Tablets_FF0378493_D8377075 (EU)	Eyes - Irritant	In vitro	-	-	-
	Skin - Irritant	In vitro	-	-	-
CITRIC ACID	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
SODIUM CARBONATE	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
I-Malic acid	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
SODIUM DODECYLBENZENESULFONATE	Eyes - Severe irritant	Rabbit	-	1 %	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Eyes - Visible necrosis	Rabbit	-	72 hours	6 days
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

Conclusion/Summary

SECTION 11: Toxicological information

- Skin** : Causes skin irritation. Bridging principle "Substantially similar mixtures"
- Eyes** : Causes serious eye irritation. Bridging principle "Substantially similar mixtures"
- 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 routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

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.

SECTION 11: Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : 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 ACID	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
SODIUM CARBONATE PEROXIDE	Acute EC50 4.9 mg/l	Daphnia - Daphnia Pulex	48 hours
SODIUM CARBONATE	Acute EC50 242000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute LC50 176000 µg/l Fresh water	Crustaceans - Amphipoda	48 hours
	Acute LC50 265000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 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 : Not available.

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
pentapotassium bis (peroxymonosulphate) bis (sulphate)	<0.3	-	low
CITRIC ACID	-1.8	-	low
l-Malic acid	-1.26	-	low
SODIUM DODECYLBENZENESULFONATE	1.96	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : 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 user : **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 acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [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
Skin Irrit. 2, H315 Eye Irrit. 2, H319	Calculation method Calculation method

Full text of abbreviated H statements

H272 H302 H312 H314 H315 H318 H319 H332 H335 H412	May intensify fire; oxidizer. Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]

Acute Tox. 4 Aquatic Chronic 3 Eye Dam. 1 Eye Irrit. 2 Ox. Sol. 3 Skin Corr. 1B Skin Irrit. 2 STOT SE 3	ACUTE TOXICITY - Category 4 AQUATIC HAZARD (LONG-TERM) - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 OXIDIZING SOLIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
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To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.

This list of information must not be considered as exhaustive, and does not exonerate the recipient from taking other precautions described in documents other than those mentioned, concerning the storage and use of the product, for which they remain the sole person responsible.