ECOLAB SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

BRILLIANT PEROXY DESTAINER

Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Substance type:

BRILLIANT PEROXY DESTAINER CLP Mixture

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

Use of the Substance/Mixture : Laundry detergent

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet:

COMPANY IDENTIFICATION Ecolab Ltd. PO Box 11; Winnington Avenue Northwich, Cheshire,, CW8 4DX, United Kingdom TEL: + 44 (0)1606 74488

LOCAL COMPANY IDENTIFICATION

Ecolab Ltd. PO Box 11; Winnington Avenue Northwich, Cheshire,, CW8 4DX, United Kingdom TEL: + 44 (0)1606 74488

For Product Safety information please contact: msdseame@nalco.com

1.4 Emergency telephone number:

| Emergency telephone number | : Trans-European +441618841235 +32-(0)3-575-5555 Trans-European Address European Economic Area HQ |
|----------------------------|--|
|----------------------------|--|

| Date of Compilation/Revision: | 03.09.2019 |
|-------------------------------|------------|
| Version Number: | 1.0 |

Section: 2. HAZARDS IDENTIFICATION

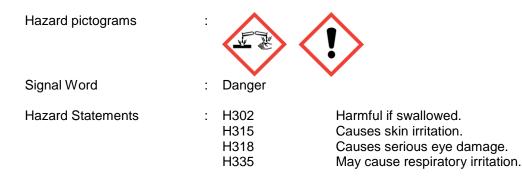
2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4H302Skin irritation, Category 2H315Serious eye damage, Category 1H318Specific target organ toxicity - single exposure, CategoryH3353Respiratory systemH315

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



| Precautionary Statements : | Prevention: P261 P280 | Avoid breathing mist or vapours. Wear protective gloves/ eye protection/ face protection. |
|----------------------------|------------------------------------|---|
| | Response: | |
| | P303 + P361 + P3 | 353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |
| | P305 + P351 + P3 | 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P310 | Immediately call a POISON CENTER/doctor. |

Hazardous components which must be listed on the label: Hydrogen Peroxide

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

| Chemical Name | CAS-No. EC-No. REACH No. | Classification (REGULATION (EC) No 1272/2008) | Concentration: [%] |
|-------------------|--|---|-----------------------|
| Hydrogen Peroxide | 7722-84-1 231-765-0 01-2119485845-22 | Nota B Oxidizing liquids Category 1; H271 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Skin corrosion Category 1A; H314 | 35 - < 50 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

| If inhaled | : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur. |
|-------------------------|---|
| In case of skin contact | Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists. |
| In case of eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |

| If swallowed | : Rinse mouth. Get medical attention if symptoms occur. | |
|----------------------------|--|--|
| Protection of first-aiders | : In event of emergency assess the danger before taking action Do not put yourself at risk of injury. If in doubt, contact emergency responders.Use personal protective equipment a required. | |

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of immediate medical attention and special treatment needed

| Treatment | : Treat symptomatically. |
|-----------|--------------------------|
| | |

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

| | Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-----|---|-----|---|
| | Unsuitable extinguishing media | : | None known. |
| 5.2 | Special hazards arising from t | the | substance or mixture |
| | Specific hazards during firefighting | : | Not flammable or combustible. |
| | Hazardous combustion products | : | Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus |
| 5.3 | Advice for firefighters | | |
| | Special protective equipment for firefighters | : | Use personal protective equipment. |
| | Further information | : | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

| Advice for non-emergency personnel | : | Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. |
|---------------------------------------|---|--|
| Advice for emergency | : | If specialised clothing is required to deal with the spillage, take |

| responders | note of any information in Section 8 on suitable and unsuitable materials. | | |
|---|---|--|--|
| 6.2 Environmental precautions | | | |
| Environmental precautions | : Do not allow contact with soil, surface or ground water. | | |
| 6.3 Methods and materials for containment and cleaning up | | | |
| Methods for cleaning up | : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). | | |

For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information. For personal protection see section 8. See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

| Advice on safe handling | : Avoid contact with skin and eyes. Do not ingest. Do not breathe spray, vapour. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. |
|-------------------------|--|
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re- use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |

7.2 Conditions for safe storage, including any incompatibilities

| Requirements for storage areas and containers | : Do not store on wooden pallets. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers. |
|---|--|
| Suitable material | : Keep in properly labelled containers. |
| Unsuitable material | : |
| 7.3 Specific end uses | not determined |
| Specific use(s) | : Laundry detergent |

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

| Components | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|-------------------|-----------|-------------------------------|--------------------|----------|
| Hydrogen Peroxide | 7722-84-1 | TWA | 1 ppm 1.4 mg/m3 | UKCOSSTD |
| | | STEL | 2 ppm 2.8 mg/m3 | UKCOSSTD |

DNEL

| Hydrogen Peroxide | : | End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - local Value: 3 mg/m3 |
|-------------------|---|--|
| | | End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1.4 mg/m3 |

PNEC

| PNEC | |
|-------------------|--|
| Hydrogen Peroxide | : Fresh water Value: 0.0126 mg/l |
| | Marine water Value: 0.0126 mg/l |
| | Intermittent release Value: 0.0138 mg/l |
| | STP Value: 4.66 mg/l |
| | Fresh water sediment Value: 0.047 mg/kg |
| | Marine sediment Value: 0.047 mg/kg |
| | Soil Value: 0.0023 mg/kg |

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice.Remove and wash contaminated clothing before re- use.Wash face, hands and any exposed skin thoroughly after handling.Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard. |
|------------------------------|---|---|
| Eye/face protection (EN 166) | : | Safety goggles Face-shield |
| Hand protection (EN 374) | : | Recommended preventive skin protection Gloves Nitrile rubber butyl-rubber |

| | Breakthrough time: 1 – 4 hours Minimum thickness for butyl-rubber 0.3 mm for nitrile rubber 0.2 mm or equivalent (please refer to the gloves manufacturer/distributor for advise). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. | |
|--|---|--|
| Skin and body protection (EN 14605) | Wear suitable protective clothing. | |
| Respiratory protection (EN 143, 14387) | When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:A-P | |
| Environmental exposure controls | | |
| General advice | Consider the provision of containment around storage vessels. | |

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance | : | liquid |
|--|---|-------------------|
| Colour | : | clear |
| Odour | : | no data available |
| Flash point | : | no data available |
| рН | : | no data available |
| Odour Threshold | : | no data available |
| Melting point/freezing point | : | no data available |
| Initial boiling point and boiling range | : | no data available |
| Evaporation rate | : | no data available |
| Flammability (solid, gas) | : | no data available |
| Upper explosion limit | : | no data available |
| Lower explosion limit | : | no data available |
| Vapour pressure | : | no data available |
| Relative vapour density | : | no data available |
| Relative density | : | 1.128 - 1.138 |
| Water solubility | : | no data available |
| Solubility in other solvents | : | no data available |
| Partition coefficient: n- octanol/water | : | no data available |
| Auto-ignition temperature | : | no data available |
| Thermal decomposition | : | no data available |

| Viscosity, dynamic | : no data available |
|----------------------|---------------------|
| Viscosity, kinematic | : no data available |
| Explosive properties | : no data available |
| Oxidizing properties | : no data available |
| | |

9.2 Other information

no data available

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Contamination may result in dangerous pressure increases - closed containers may rupture.

10.3 Possibility of hazardous reactions

| Hazardous reactions | : | No dangerous reaction known under conditions of normal use |
|---------------------|---|--|
| | | no dangerous reaction known ander obhaltions of normal ase |

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

10.6 Hazardous decomposition products

| Hazardous decomposition products | Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus |
|----------------------------------|---|
| | |

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| Information on likely routes of | : Inhalation, Eye contact, Skin contact | |
|---------------------------------|---|--|
| exposure | | |

Toxicity

Product

| Acute oral toxicity | : | Acute toxicity estimate : 991.84 mg/kg |
|---------------------------|---|--|
| Acute inhalation toxicity | : | Acute toxicity estimate : > 20 mg/l Exposure time: 4 h Test atmosphere: vapour |
| Acute dermal toxicity | : | There is no data available for this product. |
| Skin corrosion/irritation | : | There is no data available for this product. |

| Serious eye damage/eye irritation | : There is no data available for this product. |
|-----------------------------------|--|
| Respiratory or skin sensitization | : There is no data available for this product. |
| Carcinogenicity | : There is no data available for this product. |
| Reproductive effects | : There is no data available for this product. |
| Germ cell mutagenicity | : There is no data available for this product. |
| Teratogenicity | : There is no data available for this product. |
| STOT - single exposure | : There is no data available for this product. |
| STOT - repeated exposure | : There is no data available for this product. |
| Aspiration toxicity | : There is no data available for this product. |
| Components | |
| Acute oral toxicity | : Hydrogen Peroxide LD50 rat: 486 mg/kg |
| Potential Health Effects | |
| Eyes | : Causes serious eye damage. |
| Skin | : Causes skin irritation. |
| Ingestion | : Harmful if swallowed. |
| Inhalation | : May cause respiratory tract irritation. May cause nose, throat, and lung irritation. |
| Chronic Exposure | : Health injuries are not known or expected under normal use. |
| Experience with human expos | ure |
| Euro constant | Deduces Dein Companies |

| Further information | : no data available |
|---------------------|---------------------------------|
| Inhalation | : Respiratory irritation, Cough |
| Ingestion | : No information available. |
| Skin contact | : Redness, Irritation |
| Eye contact | : Redness, Pain, Corrosion |

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Product

Environmental Effects

: This product has no known ecotoxicological effects.

| Toxicity to fish | : no data available |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : no data available |
| Toxicity to algae | : no data available |
| Components | |
| Toxicity to algae | : Hydrogen Peroxide 72 h EC50: 1.38 mg/l |

12.2 Persistence and degradability

| Product | |
|-------------------|---|
| no data available | |
| Components | |
| Biodegradability | : Hydrogen Peroxide Result: Not applicable - inorganic |

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste.Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

| Product | Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. |
|------------------------|--|
| Contaminated packaging | : Dispose of as unused product. |

| | | Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. |
|--------------------------------------|---|---|
| Guidance for Waste Code selection | : | Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations. |

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

| Land transport (ADR/ADN/RID) 14.1 UN number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group: 14.5 Environmental hazards: 14.6 Special precautions for user: | UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION 5.1 II No Not applicable. |
|--|---|
| Air transport (IATA) 14.1 UN number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group: 14.5 Environmental hazards: 14.6 Special precautions for user: | UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION 5.1 II No Not applicable. |
| Sea transport (IMDG/IMO) 14.1 UN number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group: 14.5 Environmental hazards: 14.6 Special precautions for user: 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: | UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION 5.1 II No Not applicable. Not applicable. |

Section: 15. REGULATORY INFORMATION

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

INTERNATIONAL CHEMICAL CONTROL LAWS

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

| Classification | Justification |
|---|--------------------|
| Acute toxicity 4, H302 | Calculation method |
| Skin irritation 2, H315 | Calculation method |
| Serious eye damage 1, H318 | Calculation method |
| Specific target organ toxicity - single exposure 3, | Calculation method |
| H335 | |

Full text of H-Statements

| H271 | May cause fire or explosion; strong oxidiser. |
|------|---|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H332 | Harmful if inhaled. |

Full text of other abbreviations

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS -Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS – Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

| compile the Safety Data of Chem | phographs on the Evaluation of the Carcinogenic Risk icals to Man, Geneva: World Health Organization, onal Agency for Research on Cancer. |
|---------------------------------|---|
|---------------------------------|---|

The possible key literature references and data sources which

may have been used in conjunction with the consideration of expert judgment to compile this Safety Data Sheet: European regulations/directives (including (EC) No. 1907/2006, (EC) No. 1272/2008), supplier data, inter-net, ESIS, IUCLID, ERIcards, Non European official regulatory data and other data sources.

Prepared By : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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