

SECTION 1: Identification

1.1. Product identifier

Trade name : ProteClean Green+
Type of product : Detergent
UN-No. (ADR) : 1823

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

Use of the substance/mixture : Cleaning agent
Recommended use : Commercial cleaner

1.3. Supplier's details

Manufacturer/Supplier

Fri-Jado B.V.
Blauwhekken 2
4751 XD Oud Gastel - Netherlands
T +31 (76) 50 85 400

Email competent person

sds@kft.de

Distributor

Foodserv Solutions Division
9 Watkins Street
Denver Ext 4 Gauteng
Johannesburg - South Africa
T 0027 116165183

1.4. Emergency telephone number

Emergency number : 0049 621 845799732

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Oxidising solids Not classified
Corrosive to metals, Category 1 H290
Acute toxicity (oral) Not classified
Skin corrosion/irritation, Category 1 H314
Serious eye damage/eye irritation, Category 1 H318
Respiratory sensitisation, Category 1 H334
Hazardous to the aquatic environment — H402
Acute Hazard, Category 3
Full text of H-statements: see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :



Signal word (GHS-ZA) : Danger
Hazardous ingredients : Disodium carbonate, compound with hydrogen peroxide (2:3); subtilisin; sodium hydroxide
Hazard statements (GHS ZA) : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H402 - Harmful to aquatic life
Precautionary statements (GHS ZA) : P260 - Do not breathe dust.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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According to SANS 10234:2019 and SANS 11014:2010

contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER, a doctor.
P390 - Absorb spillage to prevent material damage.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : May be corrosive to metals, Causes severe skin burns and eye damage, May cause allergy or asthma symptoms or breathing difficulties if inhaled, Harmful to aquatic life

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
sodium hydroxide	(CAS-No.) 1310-73-2	≥ 50 – < 70	Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
sodium carbonate	(CAS-No.) 497-19-8	≥ 10 – < 20	Eye Irrit. 2A, H319
Disodium carbonate, compound with hydrogen peroxide (2:3)	(CAS-No.) 15630-89-4	≥ 5 – < 10	Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 2, H401
Tetrasodium (1-hydroxyethylidene)bisphosphonate	(CAS-No.) 3794-83-0	≥ 2,5 – < 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane	(CAS-No.) 9038-95-3	≥ 1 – < 2,5	Acute Tox. 4 (Oral), H302
subtilisin	(CAS-No.) 9014-01-1	≥ 0,1 – < 0,25	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Product is not explosive.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Nitrogen oxides. Sulphur oxides. Phosphorus oxides. Metal oxides. Silicon oxide.

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According to SANS 10234:2019 and SANS 11014:2010

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

- Protective equipment : Wear personal protective equipment.
- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Avoid dust formation.
- Other information : Disposal must be done according to official regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust. Keep container tightly closed.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep only in original container. Keep container tightly closed. Keep cool. Protect from moisture. Store locked up.
- Storage area : Base-resistant floor.
- Incompatible materials : Metals.
- Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.
- Special rules on packaging : Store in original container or corrosive resistant and/or lined container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide (1310-73-2)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Sodium hydroxide
OEL STEL	2 mg/m ³
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Sodium hydroxide
Regulatory reference	Government Notice No. R 904
subtilisin (9014-01-1)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Subtilisins (proteolytic enzymes)
OEL TWA	0 mg/m ³
OEL STEL	0 mg/m ³
Regulatory reference	Government Notice. R: 1179

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South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Subtilisins [Proteolytic enzymes as 100% pure crystalline enzyme]
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	: Chemically resistant protective gloves. For undissolved solid substances following materials may be suitable: Butyl rubber, Chloroprene rubber, Fluoroelastomer (FKM), Nitrile rubber. EN 374. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear
Eye protection	: Wear closed safety glasses. EN 166. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure
Skin and body protection	: Wear suitable protective clothing. EN ISO 13688
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Short term exposure. Dust production: dust mask with filter type P2. EN 143

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: cartridge. Powder.
Colour	: white. Green.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
pH solution	: 10.5 – 13 (Aqueous solution 1 %)
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: > 80 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: 1080 – 1143 kg/m ³
Relative gas density	: No data available
Solubility	: Water: Material highly soluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

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Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: No data available
Lower explosive limit (LEL)	: No data available
Upper explosive limit (UEL)	: No data available

9.2. Other information

VOC content	: 0 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat. Protect from moisture.

10.5. Incompatible materials

metals.

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 toxicological effects

Acute toxicity (oral)	: Not classified. (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

ProteClean Green+	
ATE oral	> 5000 mg/kg bodyweight
Disodium carbonate, compound with hydrogen peroxide (2:3) (15630-89-4)	
LD50 oral rat	1034 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight
Tetrasodium (1-hydroxyethylidene)bisphosphonate (3794-83-0)	
LD50 oral rat	940 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 1650 mg/kg bodyweight (OECD 402 method)
1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane (9038-95-3)	
LD50 oral rat	300 – 2000 mg/kg bodyweight
subtilisin (9014-01-1)	
LD50 oral rat	1800 mg/kg bodyweight (OECD 201 method)

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Not applicable)

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According to SANS 10234:2019 and SANS 11014:2010

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Harmful to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

sodium hydroxide (1310-73-2)	
LC50 - Fish [1]	35 – 189 mg/l
EC50 - Crustacea [1]	40.4 mg/l (48 h; Ceriodaphnia sp.)
Disodium carbonate, compound with hydrogen peroxide (2:3) (15630-89-4)	
LC50 - Fish [1]	70.7 mg/l (48h; Pimephales promelas)
EC50 - Crustacea [1]	4.9 mg/l (48h; Daphnia pulex)
subtilisin (9014-01-1)	
LC50 - Fish [1]	8.2 mg/l (96h; Oncorhynchus mykiss (Rainbow trout); (OECD 203 method))
EC50 - Crustacea [1]	0.868 mg/l (48 h; Daphnia magna (Water flea); (OECD 202 method))
ErC50 algae	0.29 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method))
NOEC chronic fish	0.042 mg/l (32 d; Pimephales promelas; (OECD 210 method))
NOEC chronic crustacea	0.019 mg/l (14 d; Daphnia magna (Water flea); (OECD 211 method))
NOEC chronic algae	0.041 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method))
Partition coefficient n-octanol/water (Log Pow)	-3.1 (25 °C; (OECD 107 method))

12.2. Persistence and degradability

ProteClean Green+	
Persistence and degradability	Contained surfactants are biodegradable.
sodium hydroxide (1310-73-2)	
Persistence and degradability	Not applicable for inorganic substances.
sodium carbonate (497-19-8)	
Persistence and degradability	Not applicable for inorganic substances.
Disodium carbonate, compound with hydrogen peroxide (2:3) (15630-89-4)	
Persistence and degradability	Not applicable for inorganic substances.
Tetrasodium (1-hydroxyethylidene)bisphosphonate (3794-83-0)	
Persistence and degradability	Not readily biodegradable.
1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane (9038-95-3)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	> 60 % (28 d; (OECD 301F method))
subtilisin (9014-01-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	≈ 100 % (29 d; (OECD 301B method))

12.3. Bioaccumulative potential

ProteClean Green+	
Bioaccumulative potential	The product has not been tested.
sodium hydroxide (1310-73-2)	
Bioaccumulative potential	Not applicable for inorganic substances.
sodium carbonate (497-19-8)	
Bioaccumulative potential	Not applicable for inorganic substances.
Disodium carbonate, compound with hydrogen peroxide (2:3) (15630-89-4)	
Bioaccumulative potential	Not applicable for inorganic substances.
Tetrasodium (1-hydroxyethylidene)bisphosphonate (3794-83-0)	
Partition coefficient n-octanol/water (Log Pow)	-3 (23 °C; (OECD 107 method))
Bioaccumulative potential	Bioaccumulation unlikely.
1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane (9038-95-3)	
Bioaccumulative potential	Bioaccumulation unlikely.
subtilisin (9014-01-1)	
Partition coefficient n-octanol/water (Log Pow)	-3.1 (25 °C; (OECD 107 method))
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

ProteClean Green+	
Ecology - soil	The product has not been tested.
sodium hydroxide (1310-73-2)	
Ecology - soil	Expected to be highly mobile in soil.

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sodium carbonate (497-19-8)	
Ecology - soil	Expected to be highly mobile in soil.
Tetrasodium (1-hydroxyethylidene)bisphosphonate (3794-83-0)	
Partition coefficient n-octanol/water (Log Pow)	-3 (23 °C; (OECD 107 method))
subtilisin (9014-01-1)	
Partition coefficient n-octanol/water (Log Pow)	-3.1 (25 °C; (OECD 107 method))

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

Other adverse effects : No additional information available

SECTION 13: Disposal considerations




13.1. Disposal methods

Waste treatment methods : Disposal must be done according to official regulations. Do not discharge into drains or the environment. Do not dispose of with domestic waste.

Product/Packaging disposal recommendations : Recycle or dispose of in compliance with current legislation.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
1823	1823	1823
14.2. Proper Shipping Name		
SODIUM HYDROXIDE, SOLID	SODIUM HYDROXIDE, SOLID	Sodium hydroxide, solid
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- SANS

Limited quantities (SANS) : 1 L

Limited quantities (SANS) : 1 L

Packagings, large packagings and IBCs : P001, IBC02

Packing instructions (SANS)

Portable tank and bulk containers instructions (SANS) : T7

Portable tank and bulk container special provisions (SANS) : TP2

- IMDG

Limited quantities (IMDG) : 1 kg

Excepted quantities (IMDG) : E2

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

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- IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y844
PCA limited quantity max net quantity (IATA)	: 5kg
PCA packing instructions (IATA)	: 859
PCA max net quantity (IATA)	: 15kg
CAO max net quantity (IATA)	: 50kg

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date	: 06/07/2021
Revision date	: 06/07/2021
Data sources	: Information provided by the manufacturer. MSDSs of the suppliers. ECHA (European Chemicals Agency).
Department issuing data specification sheet:	: KFT Chemieservice GmbH Im Leuschnerpark 3 D-64347 Griesheim Phone: +49 6155-8981-400 Fax: +49 6155 8981-500 SDS Service: +49 6155 8981-522
Contact person	: Julia Wack
Abbreviations and acronyms	: 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 ATE - Acute Toxicity Estimate BCF - Bioconcentration factor CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 DMEL - Derived Minimal Effect level DNEL - Derived-No Effect Level EC50 - Median effective concentration IARC - International Agency for Research on Cancer IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LC50 - Median lethal concentration LD50 - Median lethal dose LOAEL - Lowest Observed Adverse Effect Level NOAEC - No-Observed Adverse Effect Concentration NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration OECD - Organisation for Economic Co-operation and Development PBT - Persistent Bioaccumulative Toxic PNEC - Predicted No-Effect Concentration REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 RID - Regulations concerning the International Carriage of Dangerous Goods by Rail SDS - Safety Data Sheet STP - Sewage treatment plant TLM - Median Tolerance Limit vPvB - Very Persistent and Very Bioaccumulative

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Other information : Version/s 1.00 is/are not available in this language.

Full text of H-statements:

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.