Boensop

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 12-12-2016 Revision date: 20-6-2024 Supersedes version of: 12-7-2022 Version: 3.1

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Boensop
UFI	:	EE90-NJSV-0605-G1NC
Product code	:	272362, 272366
Type of product	:	Detergent
Product group	:	Cleaning product

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

Relevant identified uses

Main use category	:	Professional use
Industrial/Professional use spec	:	Wide dispersive use
Use of the substance/mixture	:	The information given in this MSDS concerns the product and is given on the assumption mentioned in section 1.1, that the product will be used in the manner and for the purposes indicated by the manufacturer.
Use of the substance/mixture	:	Cleaner

1.3. Details of the supplier of the safety data sheet

Distributor
JeFo Ship Supply
Roomweg 6-B
NL 8334 NR Tuk
Nederland
T +31(0)683701219
info@jefoshipsupply.nl, www.jefoshipsupply.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning.

Hazard statements (CLP) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves.
P337+P313 - If eye irritation persists: Get medical advice/attention.

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Butoxyethanol substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0 REACH-no: 01-2119475108-36	1 – 5	Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Oral), H302 (ATE=1200 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319
C9-11 PARETH-6	CAS-No.: 68439-46-3 REACH-no: Polymer	1 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318
Tetrapotassiumpyrophosphate	CAS-No.: 7320-34-5 EC-No.: 230-785-7 REACH-no: 01-2119489369-18	1 – 5	Eye Irrit. 2, H319
potassium hydroxide substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	0,1 – 1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=333 mg/kg bodyweight) Skin Corr. 1A, H314
citral substance with national workplace exposure limit(s) (IE)	CAS-No.: 5392-40-5 EC-No.: 226-394-6 EC Index-No.: 605-019-00-3 REACH-no: 01-2119462829-23	< 0,01	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	(0,5 ≤ C < 2) Eye Irrit. 2; H319 (0,5 ≤ C < 2) Skin Irrit. 2; H315 (2 ≤ C < 5) Skin Corr. 1B; H314 (5 ≤ C < 100) Skin Corr. 1A; H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : If you feel unwell, seek medical advice.

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

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

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

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Storage temperature : 10 – 30 °C
Storage area : Store in a clean, dry, fire resistant area. Ensure that there is a suitable ventilation system.
Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Carefully comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

2-Butoxyethanol (111-76-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-Butoxyethanol
IOEL TWA	98 mg/m³
	20 ppm
IOEL STEL	246 mg/m³
	50 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	2-Butoxyethanol (EGBE) [Ethylene glycol monobutyl ether]
OEL TWA	98 mg/m³
	20 ppm
OEL STEL	246 mg/m³
	50 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)

2-Butoxyethanol (111-76-2)	
Regulatory reference	Chemical Agents Code of Practice 2024
Ireland - Biological limit values	
Local name	2-Butoxyethanol
BMGV	200 mg/g creatinine Parameter: BAA - Medium: urine - Sampling time: End of shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
United Kingdom - Occupational Exposure Limits	
Local name	2-Butoxyethanol
WEL TWA (OEL TWA)	123 mg/m³
	25 ppm
WEL STEL (OEL STEL)	246 mg/m³
	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	2-Butoxyethanol
BMGV	240 mmol/mol Creatinine Parameter: butoxyacetic acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

potassium hydroxide (1310-58-3)	
Ireland - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL STEL	2 mg/m³
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide
WEL STEL (OEL STEL)	2 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

citral (5392-40-5)	
Ireland - Occupational Exposure Limits	
Local name	Citral
OEL TWA	5 ppm IFV (Inhlable Fraction and Vapour)
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

DNEL and PNEC

DL-Alanine-N,N-diacetic acid trisodium salt (164462-16-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2000 mg/kg bodyweight/day
Acute - systemic effects, inhalation	40 mg/m³
Acute - local effects, dermal	2000 mg/cm²
Acute - local effects, inhalation	40 mg/m³
Long-term - systemic effects, dermal	170 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	40 mg/m³
Long-term - local effects, inhalation	4 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	400 mg/kg bodyweight/day
Acute - systemic effects, inhalation	20 mg/m³
Acute - systemic effects, oral	85 mg/kg bodyweight/day
Acute - local effects, dermal	400 mg/cm²
Acute - local effects, inhalation	20 mg/m³
Long-term - systemic effects,oral	17 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	20 mg/m³
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day
Long-term - local effects, inhalation	2 mg/m³
PNEC (Soil)	
PNEC soil	2,5 mg/kg dwt

C9-11 PARETH-6 (68439-46-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2080 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	294 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	87 mg/m³
Long-term - systemic effects, dermal	1250 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,10379 mg/l
PNEC aqua (marine water)	0,10379 mg/l
PNEC aqua (intermittent, freshwater)	0,014 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13,7 mg/kg dwt
PNEC sediment (marine water)	13,7 mg/kg dwt
PNEC (Soil)	
PNEC soil	1 mg/kg dwt

C9-11 PARETH-6 (68439-46-3)	
PNEC (STP)	
PNEC sewage treatment plant	1,4 mg/l

2-Butoxyethanol (111-76-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	≈ 125 mg/kg bodyweight/day
Acute - systemic effects, inhalation	≈ 1091 mg/m³
Acute - local effects, inhalation	≈ 246 mg/m³
Long-term - systemic effects, dermal	≈ 125 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	≈ 98 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	≈ 89 mg/kg bodyweight
Acute - systemic effects, inhalation	≈ 426
Acute - systemic effects, oral	≈ 26,7 mg/kg bodyweight
Acute - local effects, inhalation	≈ 147 mg/m³
Long-term - systemic effects,oral	≈ 6,3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	≈ 59 mg/m³
Long-term - systemic effects, dermal	≈ 75 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	8,8 mg/l
PNEC aqua (marine water)	0,88 mg/l
PNEC aqua (intermittent, freshwater)	9,1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	34,6 mg/kg dwt
PNEC sediment (marine water)	3,46 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,33 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	463 mg/l

Tetrapotassiumpyrophosphate (7320-34-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	44,08 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	10,87 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,05 mg/l
PNEC aqua (marine water)	0,005 mg/l
PNEC aqua (intermittent, freshwater)	0,5 mg/l

Tetrapotassiumpyrophosphate (7320-34-5)	
PNEC (STP)	
PNEC sewage treatment plant	50 mg/l

potassium hydroxide (1310-58-3)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Wear security glasses which protect from splashes (EN ISO16321 CH)

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Protection for Liquid particles, Droplet	With side shields	EN ISO 16321 CH

Skin protection

Skin and body protection:
Long sleeved protective clothing (EN 14605)

Skin and body protection	
Type	**Standard**
Tyvek® Gown/Coveralls	EN 14605

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0,4	2 (< 1.5)	EN 374-2

Respiratory protection

Respiratory protection:
No respiratory protection needed under normal use conditions

Environmental exposure controls

Environmental exposure controls:
Carefully comply with the instructions for use. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
Appearance	:	Clear.
Odour	:	perfumed.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	13
pH solution concentration	:	100 %
Viscosity, kinematic	:	< 19,324 mm²/s
Viscosity, dynamic	:	< 20 mPa·s
Solubility	:	completely soluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1,035 g/ml
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

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

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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 (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)

C9-11 PARETH-6 (68439-46-3)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1,6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

2-Butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	2200 mg/l

Tetrapotassiumpyrophosphate (7320-34-5)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FMC Non-Definitive Dermal Toxicity Protocol (Number 7), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1,1 mg/l air Animal: rat, Guideline: other:FMC Acute Inhalation Toxicity Protocol Number 27, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:US EPA Toxic Substances Health Effect Test Guidelines, October, 1984; (PB82-232984) Acute Inhalation Toxicity Study., Guideline: other:Commission of the European Communities, Council Directive 67/548/EEC, Annex V, Part B.2.; May 1, 1987, Guideline: other:US EPA Pesticide Assessment Guidelines: Subdivision F, Hazard Evaluation: Human and Domestic Animals, Nov, 1984; 81-3 Acute Inhalation Study

potassium hydroxide (1310-58-3)	
LD50 oral	333 mg/kg bodyweight

citral (5392-40-5)	
LD50 oral rat	≈ 6800 mg/kg bodyweight Animal: rat
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat

Skin corrosion/irritation : Causes skin irritation.
pH: 13
Serious eye damage/irritation : Causes serious eye irritation.
pH: 13
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
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)

citral (5392-40-5)	
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)

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)

C9-11 PARETH-6 (68439-46-3)	
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

2-Butoxyethanol (111-76-2)	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Tetrapotassiumpyrophosphate (7320-34-5)	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

citral (5392-40-5)	
LOAEC (inhalation, rat, gas, 90 days)	68 ppm Animal: rat, Animal sex: female
NOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEC (inhalation, rat, gas, 90 days)	34 ppm Animal: rat, Animal sex: female
NOAEL (subchronic, oral, animal/male, 90 days)	60 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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

Boensop	
Viscosity, kinematic	< 19,324 mm²/s

2-Butoxyethanol (111-76-2)	
Viscosity, kinematic	3,7 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

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

C9-11 PARETH-6 (68439-46-3)	
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2,5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

2-Butoxyethanol (111-76-2)	
LC50 - Fish [1]	1474 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	≈ 1800 mg/l Test organisms (species): Daphnia magna

2-Butoxyethanol (111-76-2)	
EC50 72h - Algae [1]	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'

Tetrapotassiumpyrophosphate (7320-34-5)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

potassium hydroxide (1310-58-3)	
LC50 - Fish [1]	80 mg/l

citral (5392-40-5)	
LC50 - Fish [1]	6,78 mg/l Test organisms (species): Leuciscus idus
EC50 - Crustacea [1]	6,8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	103,8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

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

C9-11 PARETH-6 (68439-46-3)	
Persistence and degradability	Rapidly degradable

2-Butoxyethanol (111-76-2)	
Persistence and degradability	Rapidly degradable

Tetrapotassiumpyrophosphate (7320-34-5)	
Persistence and degradability	Rapidly degradable

potassium hydroxide (1310-58-3)	
Persistence and degradability	Rapidly degradable

citral (5392-40-5)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

2-Butoxyethanol (111-76-2)	
Partition coefficient n-octanol/water (Log Pow)	0,81

Tetrapotassiumpyrophosphate (7320-34-5)	
Partition coefficient n-octanol/water (Log Pow)	-10,45
potassium hydroxide (1310-58-3)	
Partition coefficient n-octanol/water (Log Pow)	0,75
citral (5392-40-5)	
Partition coefficient n-octanol/water (Log Pow)	2,8

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers can be dumped after cleaning according to local legislation. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecological waste information : Avoid release to the environment.
European List of Waste (LoW, EC 2000/532) : 20 01 29* - detergents containing dangerous substances
HP Code : HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Detergent Regulation (648/2004)

Allergenic fragrances > 0.01 %:
Limonene

Labelling of contents

Component	%
anionic surfactants, non-ionic surfactants, phosphates	<5%
perfumes	
Limonene	

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
	Supersedes	**Modified**
	Revision date	**Modified**
1.1	UFI on SDS 1.1	**Added**
1.2	Use of the substance/mixture	**Modified**
1.2	Function or use category	**Removed**
3	Composition/information on ingredients	**Modified**
8.2	Eye protection	**Modified**
8.2	Skin and body protection	**Modified**
8.2	Respiratory protection	**Modified**
9	Concentration of the solution used for the pH measurement	**Added**

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

Abbreviations and acronyms:	
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
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disruptor

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

Full text of H- and EUH-statements:	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Irrit. 2	H315	Concentration limits
Eye Irrit. 2	H319	Concentration limits

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.