

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SDS Reference Number: 100342700 Revision date: 9/23/2024 Supersedes version of: 11/2/2021 Version: 7.0

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

1.1. Product identifier

Product form : Mixture

: FRIONETT POWER ULTRA Name UFI : 5E30-W0AC-E007-MVRN

Product code : 100342700 Type of product : Detergent

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

Relevant identified uses

Main use category : Professional use Use of the substance/mixture : Cleaning product

1.3. Details of the supplier of the safety data sheet

Supplier

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France

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Other

Galco Singapore Branch 135 Cecil Street #10-01

Singapore

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1.4. Emergency telephone number

Emergency number : +33 (0) 1 72 11 00 03

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 Irrit. 2 H315
Eye Irrit. 2 H319
Skin Sens. 1 H317
Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. 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

Contains : N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine

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

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours.

P280 - Wear protective gloves, protective clothing/eye protection/face protection.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

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P337+P313 - If eye irritation persists: Get medical advice/attention. P363 - Wash contaminated clothing before reuse.

2.3. Other hazards

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	potassium hydroxide (1310-58-3), 2-(2-butoxyethoxy)ethanol (112-34-5)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	potassium hydroxide (1310-58-3), 2-(2-butoxyethoxy)ethanol (112-34-5), Benzotriazole (95-14-7)
PBT: not relevant – no registration required	sodium hydroxide; caustic soda (1310-73-2)(¹)
vPvB: not relevant – no registration required	sodium hydroxide; caustic soda (1310-73-2)(¹)

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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

Component		
Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	Benzotriazole (95-14-7)	

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine	CAS-No.: 64265-45-8 EC-No.: 264-761-2 REACH-no: 01-2120769114- 55	< 10	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411
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	1 – 5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=333 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318
2-(2-butoxyethoxy)ethanol substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119475104-	1 – 5	Eye Irrit. 2, H319
ethanol; ethyl alcohol substance with national workplace exposure limit(s) (GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-	1 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
D-pentose and D-glucose, oligomeric, C8-C10 alkyl glycosides	EC-No.: 483-960-7 REACH-no: 01-0000020220- 90	1 – 5	Eye Dam. 1, H318
2,2',2"-nitrilotriethanol	CAS-No.: 102-71-6 EC-No.: 203-049-8 REACH-no: 01-2119486482- 31	0.1 – 1	Not classified
Benzotriazole substance identified as having endocrine disrupting properties	CAS-No.: 95-14-7 EC-No.: 202-394-1 REACH-no: 01-2119979079- 20	0.1 – 1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Irrit. 2, H319 Aquatic Chronic 2, H411
sodium hydroxide; caustic soda substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-21194 57892- 27	0.0347 – 0.0694	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318

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	$(0.5 \le C < 2)$ Eye Irrit. 2; H319 $(0.5 \le C < 2)$ Skin Irrit. 2; H315 $(2 \le C < 5)$ Skin Corr. 1B; H314 $(5 \le C < 100)$ Skin Corr. 1A; H314	
D-pentose and D-glucose, oligomeric, C8-C10 alkyl glycosides	EC-No.: 483-960-7 REACH-no: 01-0000020220- 90	(10 ≤ C < 42) Eye Irrit. 2; H319 (42 ≤ C < 100) Eye Dam. 1; H318	
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-21194 57892- 27	$(0.5 \le C < 2)$ Eye Irrit. 2; H319 $(0.5 \le C < 2)$ Skin Irrit. 2; H315 $(2 \le C < 5)$ Skin Corr. 1B; H314 $(5 \le C < 100)$ 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. If you feel unwell, seek medical advice.

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

medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. First-aid measures after eye contact

: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label.

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

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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

General measures : Avoid contact with skin and eyes.

For non-emergency personnel

Emergency procedures : Evacuate area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

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 disposal of solid materials or residues refer to section 13: "Disposal considerations".

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 : Wash contaminated clothing before reuse. Contaminated work clothing should not be

allowed out of the workplace. 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 : Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store : at room

temperature.

Incompatible materials : Strong acids

Storage area : The floor of the depot should be impermeable and designed to form a water-tight basin.

Packaging materials : Recommended materials Rigid plastic materials. Unsuitable materials: Aluminium and its

alloys, Light metals, Glass.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

sodium hydroxide; caustic soda (1310-73-2)			
Ireland - Occupational Exposure Limits			
Local name	Sodium hydroxide		
OEL STEL	2 mg/m³		
United Kingdom - Occupational Exposure Limits			
Local name	Sodium hydroxide		
WEL STEL (OEL STEL)	2 mg/m³		
potassium hydroxide (1310-58-3)			
Ireland - Occupational Exposure Limits			
Local name Potassium hydroxide			
OEL STEL	2 mg/m³		
United Kingdom - Occupational Exposure Limits			
Local name	Potassium hydroxide		
WEL STEL (OEL STEL)	2 mg/m³		
2-(2-butoxyethoxy)ethanol (112-34-5)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	2-(2-Butoxyethoxy)ethanol		
IOEL TWA	67.5 mg/m³		
IOEL STEL	101.2 mg/m³		
	15 ppm		
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC		
Ireland - Occupational Exposure Limits			
Local name 2-(2-Butoxyethoxy)ethanol			
OEL TWA	67.5 mg/m³		
	10 ppm		
OEL STEL	101.2 mg/m³		
	15 ppm		
United Kingdom - Occupational Exposure Limits			
Local name	2-(2-Butoxyethoxy)ethanol		
WEL TWA (OEL TWA)	67.5 mg/m³		
	10 ppm		
WEL STEL (OEL STEL)	101.2 mg/m³		
	15 ppm		

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2-(2-butoxyethoxy)ethanol (112-34-5)		
Regulatory reference EH40/2005 (Fourth edition, 2020). HSE		
ethanol; ethyl alcohol (64-17-5)		
United Kingdom - Occupational Exposure Limits		
Local name	Ethanol	
VEL TWA (OEL TWA) 1920 mg/m³		
1000 ppm		
Regulatory reference	EH40. HSE	

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:

Safety glasses with side shields

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : dark yellow. Odour : lemon. Odour threshold : Not available Melting point : Not applicable Freezing point : Not available : > 100 °C Boiling point Flammability : Non flammable

Explosive properties : Not explosive material according to EC criteria.

Oxidising properties : Non oxidizing material according to EC criteria.

Lower explosion limit : Not available
Upper explosion limit : Not available
Flash point : Not available

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Auto-ignition temperature : Not available Decomposition temperature : Not available

oH : 1:

pH solution : 10.5 (4% aqueous solution)

Viscosity, kinematic : Not available

Solubility : In water, material soluble.

Partition coefficient n-octanol/water (Log Kow) : Not available
Vapour pressure : Not available
Vapour pressure at 50°C : Not available
Density : 1.07 g/cm³ (20°C)
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 at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

React in contact of Strong acids, Halogens (F, Cl, Br, I), Alkaline earth metals.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases: Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

potassium hydroxide (1310-58-3)		
LD50 oral rat	333 mg/kg	
2-(2-butoxyethoxy)ethanol (112-34-5)		
LD50 oral rat 3384 mg/kg		
LD50 dermal rabbit	2764 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 2090 - 3645	
LC50 Inhalation - Rat	55 – 60 mg/l/4h	

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ethanol; ethyl alcohol (64-17-5)			
LD50 oral rat	15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560		
LD50 oral	8300 mg/kg bodyweight Animal: mouse		
LD50 dermal rabbit	> 20000 mg/kg		
LC50 Inhalation - Rat	> 8000 mg/l/4h		
N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]6	ethyl]-ß-alanine (64265-45-8)		
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)		
D-pentose and D-glucose, oligomeric, C8-C1	0 alkyl glycosides		
LD50 oral rat	≥ 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)		
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)		
2,2',2"-nitrilotriethanol (102-71-6)			
LD50 oral rat	6400 mg/kg		
LD50 dermal rabbit	> 2000 mg/kg		
LC50 Inhalation - Rat 1.8 mg/l/8h			
Benzotriazole (95-14-7)			
LD50 oral rat	500 mg/kg		
LD50 oral	560 mg/kg bodyweight		
LD50 dermal rat	> 1000 mg/kg		
LD50 dermal rabbit	> 2000 mg/kg		
LD50 dermal	> 2000 mg/kg bodyweight		
LC50 Inhalation - Rat (Dust/Mist)	1910 mg/l		
Skin corrosion/irritation :	Causes skin irritation. pH: 12		
sodium hydroxide; caustic soda (1310-73-2)			
рН	> 14		
potassium hydroxide (1310-58-3)			
рН	≈ 13.5 Temp.: 25 °C Concentration: 5,611 g/L		
Serious eye damage/irritation :	Causes serious eye irritation. pH: 12		
sodium hydroxide; caustic soda (1310-73-2)			
pH	> 14		
potassium hydroxide (1310-58-3)			
рН	≈ 13.5 Temp.: 25 °C Concentration: 5,611 g/L		
Respiratory or skin sensitisation :	May cause an allergic skin reaction.		
Germ cell mutagenicity :	Not classified		
Carcinogenicity :	Not classified		

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2,2',2"-nitrilotriethanol (102-71-6)		
NOAEL (chronic, oral, animal/male, 2 years)	250 mg/kg bodyweight	
NOAEL (chronic, oral, animal/female, 2 years)	250 mg/kg bodyweight	
Reproductive toxicity :	Not classified	
STOT-single exposure :	Not classified	
STOT-repeated exposure :	Not classified	
2-(2-butoxyethoxy)ethanol (112-34-5)		
LOAEL (oral, rat, 90 days)	51 – 65 mg/kg bodyweight/day	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)	
NOAEC (inhalation, rat, gas, 90 days)	2 – 6 ppmv/6h/day	
ethanol; ethyl alcohol (64-17-5)		
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)	
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)	
N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine (64265-45-8)		
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)), Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	
D-pentose and D-glucose, oligomeric, C8-C10) alkyl glycosides	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
2,2',2"-nitrilotriethanol (102-71-6)		
NOAEL (subacute, oral, animal/male, 28 days)	0.5 mg/kg bodyweight	
NOAEL (subacute, oral, animal/female, 28 days)	0.5 mg/kg bodyweight	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day	
NOAEL (dermal, rat/rabbit, 90 days)	125 mg/kg bodyweight/day	
Aspiration hazard :	Not classified	
2-(2-butoxyethoxy)ethanol (112-34-5)		
Viscosity, kinematic	≈ 6.794 mm²/s	
11.2. Information on other hazards		
Endocrine disrupting properties		
	Under assessment as Endocrine Disrupting	
Component		
Benzotriazole (95-14-7)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)	

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SECTION 12: Ecological information

12.1		

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

Hazardous to the aquatic environment, long-term $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$

: Not classified

(chronic)

cnronic)		
sodium hydroxide; caustic soda (1310-73-2)		
LC50 - Fish [1]	33 – 189 mg/l	
EC50 - Crustacea [1] 40.4 mg/l Ceriodaphnia		
potassium hydroxide (1310-58-3)		
LC50 - Fish [1]	80 mg/l Gambusia affinis (Mosquito fish)	
LC50 - Fish [2]	165 mg/l Poecilia reticulata	
EC50 - Crustacea [1]	40 – 240 mg/l 48 Hours (Daphnia magna)	
2-(2-butoxyethoxy)ethanol (112-34-5)		
LC50 - Fish [1]	1300 mg/l Test organisms (species): Lepomis macrochirus	
LC50 - Fish [2]	2750 mg/l 48 Hours (Leuciscus idus melanotus)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 96h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
ethanol; ethyl alcohol (64-17-5)		
LC50 - Fish [1]	14.2 g/l Test organisms (species): Pimephales promelas	
EC50 - Crustacea [1]	> 11200 mg/l	
EC50 72h - Algae [1]	275 mg/l	
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'	
N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine (64265-45-8)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Cyprinus carpio	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	65 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h - Algae [2]	5.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
D-pentose and D-glucose, oligomeric, C8-C10	alkyl glycosides	
LC50 - Fish [1]	101 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	≈ 12 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	≥ 21 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
NOEC chronic fish	1.8 mg/l Test organisms (species): Duration: '28 d'	
NOEC chronic crustacea	1 mg/l	
2,2',2"-nitrilotriethanol (102-71-6)		
LC50 - Fish [1]	> 10000 mg/l 48 Hours (Leuciscus idus)	

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2,2',2"-nitrilotriethanol (102-71-6)	
EC50 - Crustacea [1]	609.88 mg/l (Ceriodaphnia dubia)
EC50 72h - Algae [1]	512 mg/l (Desmodesmus subspicatus)
Benzotriazole (95-14-7)	
LC50 - Fish [1]	180 mg/l 96 Hours (Danio Rerio)
LC50 - Fish [2]	180 mg/l 96 Hours (Danio Rerio)
EC50 - Crustacea [1]	15.8 mg/l (Daphnia galeata)
EC50 - Other aquatic organisms [1]	91 mg/l waterflea
EC50 - Other aquatic organisms [2]	231 mg/l
EC50 72h - Algae [1]	75 mg/l 72 Hours (Pseudokirchneriella subcapitata)
EC50 72h - Algae [2]	29 mg/l 72 Hours (Pseudokirchneriella subcapitata)
NOEC chronic crustacea	0.97 mg/l 21 days (Daphnia galeata)

12.2. Persistence and degradability

FRIONETT POWER ULTRA			
Persistence and degradability	Not established.		
sodium hydroxide; caustic soda (1310-73-2)			
Persistence and degradability	Not biodegradable.		
potassium hydroxide (1310-58-3)			
Persistence and degradability	Rapidly degradable		
2-(2-butoxyethoxy)ethanol (112-34-5)			
Persistence and degradability	Readily biodegradable.		
Biodegradation	> 60 %		
ethanol; ethyl alcohol (64-17-5)			
Persistence and degradability	dans l'eau Readily biodegradable.		
N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine (64265-45-8)			
Persistence and degradability	Rapidly degradable		
D-pentose and D-glucose, oligomeric, C8-C10 alkyl glycosides			
Persistence and degradability	Readily biodegradable.		
BOD (% of ThOD)	98 % ThOD		
2,2',2"-nitrilotriethanol (102-71-6)			
Persistence and degradability	Readily biodegradable.		
Biodegradation	100 % (5 days)		
Benzotriazole (95-14-7)			
Persistence and degradability	Rapidly degradable		

12.3. Bioaccumulative potential

sodium hydroxide; caustic soda (1310-73-2)	
Bioaccumulative potential	Not potentially bioaccumulable.

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2-(2-butoxyethoxy)ethanol (112-34-5)	
Partition coefficient n-octanol/water (Log Kow)	0.56
ethanol; ethyl alcohol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	- 0.32
D-pentose and D-glucose, oligomeric, C8-C10 alkyl glycosides	
Partition coefficient n-octanol/water (Log Pow)	0.82
2,2',2"-nitrilotriethanol (102-71-6)	
Partition coefficient n-octanol/water (Log Kow)	-2.3 (25°C; pH 7.1)
Benzotriazole (95-14-7)	
Bioconcentration factor (BCF REACH)	4.147
Partition coefficient n-octanol/water (Log Pow)	1.34

12.4. Mobility in soil

sodium hydroxide; caustic soda (1310-73-2)		
Ecology - soil	Product readily filters into the soil.	
potassium hydroxide (1310-58-3)		
Ecology - soil	Very mobile in soil.	
2,2',2"-nitrilotriethanol (102-71-6)		
Mobility in soil	Soluble in water	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1	
Benzotriazole (95-14-7)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.89	

12.5. Results of PBT and vPvB assessment

Component	ent		
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	potassium hydroxide (1310-58-3), 2-(2-butoxyethoxy)ethanol (112-34-5)		
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	potassium hydroxide (1310-58-3), 2-(2-butoxyethoxy)ethanol (112-34-5), Benzotriazole (95-14-7)		
PBT: not relevant – no registration required	sodium hydroxide; caustic soda (1310-73-2)(1)		
vPvB: not relevant – no registration required	sodium hydroxide; caustic soda (1310-73-2)(¹)		

⁽¹⁾ Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: Under assessment as Endocrine Disrupting.

endocrine disrupting properties		
Component		
Benzotriazole (95-14-7)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)	

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12.7. Other adverse effects

Other adverse effects : ODP (R-11=1)=0.

potassium hydroxide (1310-58-3)	
Throwing larger quantities down the drain or into water can lead to an increase in the pH value. A high pH value is harmful to aquatic organisms. When the concentration used is diluted, the pH value is reduced considerably	once the product has been used, the waste water entering the sewer system is only slightly harmful to water.
Additional information	Avoid (direct) release (of undiluted product) to the environment/sewage system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Ecological waste information : Do not discharge into drains or the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name	9		
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
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

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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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)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	ethanol; ethyl alcohol
3(b)	FRIONETT POWER ULTRA; 2-(2-butoxyethoxy)ethanol; ethanol; ethyl alcohol; N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine
3(c)	N-(2-hydroxyethyl)-N-[2-[(1-oxooctyl)amino]ethyl]-ß-alanine
40.	ethanol; ethyl alcohol
55.	2-(2-butoxyethoxy)ethanol

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 substance(s) listed on 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: Triethanolamine (102-71-6)

Detergent Regulation (648/2004)

Labelling of contents	
Component	%
amphoteric surfactants	5-15%
non-ionic surfactants, polycarboxylates	<5%
disinfectants	

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

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SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Adverse health effects caused by endocrine disrupting properties	Added
	Revision date	Modified
	Supersedes	Modified
1.1	UFI on SDS 1.1	Added
12.2	Persistence and degradability	Added
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added
12.7	Other adverse effects	Added
15.1	REACH Annex XVII	Added

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
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.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H411	Toxic to aquatic life with long lasting effects.	
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. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	

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.