

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 17/04/2015 Revision date: 17/04/2015 Supersedes: 25/06/2014 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : ENZYFOAM
Product code : LIQ0896
Type of product : Detergent

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

1.2.1. Relevant identified uses

Main use category : Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

REALCO S.A.

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REALZYME LLC

223 S Pioneer Blvd

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1.4. Emergency telephone number

Emergency number : Int+32-70-245.245

Country	Organisation/Company	Address	Emergency number
BELGIUM	Centre Anti-Poisons/Antigifcentrum	Rue Bruyn B -1120 Brussels	+32 70 245 245

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 Dam. 1
 H318

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : Alkyl polyglucoside C10-16
Hazard statements (CLP) : H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling

P280 - Wear protective gloves, eye protection, face protection

P302+P352 - IF ON SKIN: Wash with plenty of water

P305+P351+P338 - 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, a doctor

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

EUH phrases : EUH208 - Contains Protease (Subtilisin). May produce an allergic reaction

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
2-methoxymethylethoxypropanol	(CAS No) 34590-94-8 (EC no) 252-104-2 (REACH-no) 01-2119450011-60	5 - 15	Not classified
Alkyl polyglucoside C10-16	(CAS No) 110615-47-9 (REACH-no) 01-2119489418-23	5 - 15	Xi; R41 Xi; R38
3-butoxypropan-2-ol, propylene glycol monobutyl ether	(CAS No) 5131-66-8 (EC no) 225-878-4 (EC index no) 603-052-00-8 (REACH-no) 01-2119475527-28	1 - 5	Xi; R36/38
Triethanolamine	(CAS No) 102-71-6 (EC no) 203-049-8 (REACH-no) 01-2119486482-31	1 - 5	Not classified
Amines, coco alkyldimethyl, N-oxides	(CAS No) 61788-90-7 (EC no) 263-016-9	1 - 5	Xi; R41 Xi; R38 N; R50
D-Glucopyranose, oligomers, decyl octyl glycosides	(CAS No) 68515-73-1 (EC no) 500-220-1 (REACH-no) 01-2119488530-36	1 - 5	Xi; R41
Protease (Subtilisin)	(CAS No) 9014-01-1 (EC no) 232-752-2 (REACH-no) 01-2119480434-38	0.1 - 1	Xn; R22 R42 Xi; R41 Xi; R37/38 N; R50
2,2'-iminodiethanol, diethanolamine	(CAS No) 111-42-2 (EC no) 203-868-0 (EC index no) 603-071-00-1 (REACH-no) 01-2119488930-28	0.1 - 1	Xn; R22 Xn; R48/22 Xi; R41 Xi; R38
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methoxymethylethoxypropanol	(CAS No) 34590-94-8 (EC no) 252-104-2 (REACH-no) 01-2119450011-60	5 - 15	Not classified
Alkyl polyglucoside C10-16	(CAS No) 110615-47-9 (REACH-no) 01-2119489418-23	5 - 15	Skin Irrit. 2, H315 Eye Dam. 1, H318
3-butoxypropan-2-ol, propylene glycol monobutyl ether	(CAS No) 5131-66-8 (EC no) 225-878-4 (EC index no) 603-052-00-8 (REACH-no) 01-2119475527-28	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Triethanolamine	(CAS No) 102-71-6 (EC no) 203-049-8 (REACH-no) 01-2119486482-31	1 - 5	Not classified
Amines, coco alkyldimethyl, N-oxides	(CAS No) 61788-90-7 (EC no) 263-016-9	1 - 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400
D-Glucopyranose, oligomers, decyl octyl glycosides	(CAS No) 68515-73-1 (EC no) 500-220-1 (REACH-no) 01-2119488530-36	1 - 5	Eye Dam. 1, H318
Protease (Subtilisin)	(CAS No) 9014-01-1 (EC no) 232-752-2 (REACH-no) 01-2119480434-38	0.1 - 1	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
2,2'-iminodiethanol, diethanolamine	(CAS No) 111-42-2 (EC no) 203-868-0 (EC index no) 603-071-00-1 (REACH-no) 01-2119488930-28	0.1 - 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Chronic 3, H412

Full text of R- and H-phrases: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If on skin, take off contaminated clothing. If you feel unwell, seek medical advice (show the

label where possible).

First-aid measures after inhalation : Remove victim to fresh air. Assure fresh air breathing.

First-aid measures after skin contact : Flush with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing.

First-aid measures after ingestion : Rinse mouth.

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

Symptoms/injuries after inhalation : Cough.

Symptoms/injuries after skin contact : Repeated or prolonged skin contact may cause irritation.

Symptoms/injuries after eye contact : Redness, pain. Blurred vision. Symptoms/injuries after ingestion : Abdominal pain, nausea.

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 : All extinguishing agents can be used.

Unsuitable extinguishing media : None.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not combustible.

Explosion hazard : Product is not explosive.

Reactivity in case of fire : Stable under normal conditions of storage, handling and use.

5.3. Advice for firefighters

Precautionary measures fire : Wear proper protective equipment.

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment : Personal protection. See Heading 8.2.

Emergency procedures : Evacuate area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. See Heading 8.2.

Emergency procedures : Mark out the contaminated area with signs and prevent access to unauthorized personnel. Stop

leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dike for recovery or absorb with appropriate material.

Methods for cleaning up : Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite or kieselguhr.

Dilute residue with water.

Other information : Spill area may be slippery.

6.4. Reference to other sections

See Heading 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or

smoke when using this product.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.

Storage temperature : 4 - 25 °C

Heat and ignition sources : Store away from direct sunlight or other heat sources.

Special rules on packaging : Keep only in original container.

Packaging materials : PEHD.

7.3. Specific end use(s)

Cleaning product.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-methoxymethyle	thoxypropanol (34590-94-8)	
EU	Local name	(2-Methoxymethylethoxy)-propanol
EU	IOELV TWA (mg/m³)	308 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	Notes	Skin
Belgium	Local name	Dipropylèneglycolmonométhyléther
Belgium	Limit value (mg/m³)	308 mg/m³
Belgium	Limit value (ppm)	50 ppm
Belgium	Remark (BE)	D
Triethanolamine (1	02-71-6)	
Belgium	Local name	Triéthanolamine
Belgium	Limit value (mg/m³)	5 mg/m³
2,2'-iminodiethano	I, diethanolamine (111-42-2)	
Belgium	Local name	Diéthanolamine
Belgium	Limit value (mg/m³)	2 mg/m³
Belgium	Limit value (ppm)	0,46 ppm
Belgium	Remark (BE)	D
Protease (Subtilisi	n) (9014-01-1)	
Belgium	Limit value (mg/m³)	0,00006 mg/m³

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate air ventilation.

Personal protective equipment : Safety glasses. Mist formation: aerosol mask with filter type P3. Gloves.

Materials for protective clothing : Use chemically protective clothing

Hand protection : In case of repeated or prolonged contact wear gloves. (EN 134)

Eye protection : Chemical goggles or safety glasses. Eye protection (standard EN 166)

Skin and body protection : Use chemically protective clothing and boots (type PVC).

Respiratory protection : Approved dust or mist respirator (acc. to EN 140 or EN 136) should be used if airborne

particles are generated when handling this material. Recommended Filter: type P3 (acc. to EN 143). The entrepreneur has to ensur that maintenance cleaning and testing of respiratory

protective devices are carried out according to the instructions of the producer.







Thermal hazard protection : Not applicable.

Environmental exposure controls : Prevent entry to sewers and public waters. Avoid release to the environment.

Other information : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. The equipment must be cleaned thoroughly after each use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : light brown.
Odour : characteristic.

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Odour threshold : Not established.

рΗ : 7,3 - 8,3 Relative evaporation rate (butylacetate=1) : Not tested Melting point : Not tested Freezing point : Not tested Boiling point Not tested Flash point : Not tested Auto-ignition temperature : Not applicable Decomposition temperature : Not applicable Flammability (solid, gas) : Not applicable Vapour pressure : Not tested Relative vapour density at 20 °C : Not tested

Solubility : Material highly soluble in water.

980 - 1080

Log Pow : Not tested
Viscosity, kinematic : Not tested
Viscosity, dynamic : Not tested
Explosive properties : Not applicable.
Oxidising properties : Not applicable.
Explosive limits : No data available

9.2. Other information

Additional information : None

SECTION 10: Stability and reactivity

10.1. Reactivity

Relative density

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions of storage, handling and use.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

None under normal conditions.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2-methoxymethylethoxypropanol (34590-94-8)			
LD50 oral rat	> 5000 mg/kg		
LD50 dermal rabbit	> 10000 mg/kg		
Alkyl polyglucoside C10-16 (110615-47-9)			
LD50 oral	> 2000 mg/kg		
Triethanolamine (102-71-6)			
LD50 oral rat	6400 mg/kg		
LD50 dermal rabbit	> 2000 mg/kg		
3-butoxypropan-2-ol, propylene glycol monok	3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)		
LD50 oral rat	2700 mg/kg		
LD50 dermal rat	2000 mg/kg		
LC50 inhalation rat (mg/l)	651 mg/l/4h		
2,2'-iminodiethanol, diethanolamine (111-42-2)			
LD50 oral rat	1600 mg/kg		
LD50 dermal rabbit	> 8200 mg/kg		

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Protease (Subtilisin) (9014-01-1)	
LD50 oral	1800 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
	pH: 7,3 - 8,3
Serious eye damage/irritation	: Causes serious eye damage.
	pH: 7,3 - 8,3
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

LC50, Fish, Pimphales promelas	A		
EC50, daphnia, Daphnia magna > 100 mg/l (48 Hours)	2-methoxymethylethoxypropanol (34590-94-8		
Alkyl polyglucoside C10-16 (110615-47-9)			
Alkyl polyglucoside C10-16 (110615-47-9) LC50 fishes 1			
10 - 100 mg/l	EC50, algae	> 100 mg/l (72 Hours)	
Second S	Alkyl polyglucoside C10-16 (110615-47-9)		
Amines, coco alkyldimethyl, N-oxides (61788-90-7) LC50, Fish, acute, Danio rerio 10-100 mg/l (96 Hours, (OECD 203)) EC50, daphnia, Daphnia magna 4.4 mg/l (48 Hours, (US-EPA)) EC50, algae, Pseudokirchneriella subcapitata 0.11 mg/l (96 Hours, (US-EPA)) EC50, Bacteria, Pseudomonas putida 190 mg/l (16 Hours, (DIN 38412 part 8)) Triethanolamine (102-71-6) LC50, Fish, Pimephales promelas 11800 mg/l (96 Hours) EC50, algae, Scenedesmus subspicatus 512 mg/l (72 Hours) CSEO, daphnia, Daphnia magna 16 mg/l (21 days) 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) NOEC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia	LC50 fishes 1	10 - 100 mg/l	
LC50, Fish, acute, Danio rerio 10-100 mg/l (96 Hours, (OECD 203)) EC50, daphnia, Daphnia magna 4.4 mg/l (48 Hours, (US-EPA)) EC50, algae, Pseudokirchneriella subcapitata 190 mg/l (16 Hours, (US-EPA)) EC50, Bacteria, Pseudomonas putida 190 mg/l (16 Hours, (DIN 38412 part 8)) Triethanolamine (102-71-6) LC50, Fish, Pimephales promelas 11800 mg/l (96 Hours) EC50, daphnia, Ceriodaphnia dubia 1000 mg/l (48 Hours) EC50, algae, Scenedesmus subspicatus 512 mg/l (72 Hours) CSEO, daphnia, Daphnia magna 16 mg/l (21 days) 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (96 Hours) EC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2-iminodlethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 586 μg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg/l (48 Hours) EC50, algae 830 μg/l (72 Hours)	EC0, microorganisms	> 100 mg/l	
A.4 mg/l (48 Hours, (US-EPA))	Amines, coco alkyldimethyl, N-oxides (61788-	90-7)	
EC50, algae, Pseudokirchneriella subcapitata C50, Bacteria, Pseudomonas putida 190 mg/l (16 Hours, (US-EPA)) EC50, Bacteria, Pseudomonas putida 190 mg/l (96 Hours) EC50, daphnia, Ceriodaphnia dubia 1000 mg/l (48 Hours) EC50, algae, Scenedesmus subspicatus C512 mg/l (72 Hours) C5EO, daphnia, Daphnia magna 16 mg/l (21 days) 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 180 mg/l (96 Hours) 560 - 1000 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) EC50, daphnia, Daphnia magna > 2.2 mg/l (96 Hours) EC50, algae, Pseudokirchneriella subcapitata C5EO, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 560 mg/l (48 Hours) 560, daphnia, Daphnia magna 57.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) FC50, daphnia, Daphnia magna 55 mg/l (48 Hours) FC50, daphnia, Daphnia magna 580 μg /l (48 Hours) EC50, daphnia 580 μg /l (48 Hours)	LC50, Fish, acute, Danio rerio	10-100 mg/l (96 Hours, (OECD 203))	
EC50, Bacteria, Pseudomonas putida 190 mg/l (16 Hours, (DIN 38412 part 8)) Triethanolamine (102-71-6) LC50, Fish, Pimephales promelas 11800 mg/l (96 Hours) EC50, daphnia, Ceriodaphnia dubia 1000 mg/l (48 Hours) EC50, algae, Scenedesmus subspicatus 512 mg/l (72 Hours) CSEO, daphnia, Daphnia magna 16 mg/l (21 days) 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) EC50, algae 830 μg /l (72 Hours)	EC50, daphnia, Daphnia magna	4.4 mg/l (48 Hours, (US-EPA))	
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EC50, algae, Scenedesmus subspicatus CSEO, daphnia, Daphnia magna 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, daphnia, Daphnia magna > 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) EC50, algae 830 μg /l (72 Hours)	LC50, Fish, Pimephales promelas	11800 mg/l (96 Hours)	
CSEO, daphnia, Daphnia magna 16 mg/l (21 days) 3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, daphnia, Daphnia magna 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 556 μg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg/l (48 Hours) EC50, algae 830 μg/l (72 Hours)	EC50, daphnia, Ceriodaphnia dubia	1000 mg/l (48 Hours)	
3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8) LC50, Fish, Poecilia reticulata 560-1000 mg/l (96 Hours) NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, daphnia, Daphnia magna 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) EC50, algae 830 μg /l (72 Hours)	EC50, algae, Scenedesmus subspicatus	512 mg/l (72 Hours)	
LC50, Fish, Poecilia reticulata NOEC, Fish, Poecilia reticulata 180 mg/l (96 Hours) EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, daphnia, Daphnia magna 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) EC50, algae 830 µg /l (72 Hours)	CSEO, daphnia, Daphnia magna	16 mg/l (21 days)	
NOEC, Fish, Poecilia reticulata EC50, daphnia, Daphnia magna NOEC50, daphnia, Daphnia magna NOEC50, daphnia, Daphnia magna S60 mg/l (48 Hours) S60 mg/l (96 Hours) S60 mg/l (48 Hours)	3-butoxypropan-2-ol, propylene glycol monol	outyl ether (5131-66-8)	
EC50, daphnia, Daphnia magna > 1000 mg/l (48 Hours) NOEC50, daphnia, Daphnia magna 560 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) EC50, algae 830 µg /l (72 Hours)	LC50, Fish, Poecilia reticulata	560-1000 mg/l (96 Hours)	
NOEC50, daphnia, Daphnia magna S60 mg/l (48 Hours) NOEC50, algae, Selenastrum capricornutum 560 mg/l (96 Hours) 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) EC50, algae 830 µg /l (72 Hours)	NOEC, Fish, Poecilia reticulata	180 mg/l (96 Hours)	
NOEC50, algae, Selenastrum capricornutum 2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) EC50, algae 830 µg /l (72 Hours)	EC50, daphnia, Daphnia magna	> 1000 mg/l (48 Hours)	
2,2'-iminodiethanol, diethanolamine (111-42-2) EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) ErC50, algae 830 µg /l (72 Hours)	NOEC50, daphnia, Daphnia magna	560 mg/l (48 Hours)	
EC50, algae, Pseudokirchneriella subcapitata 2.2 mg/l (Hours) 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 µg /l (48 Hours) ErC50, algae 830 µg /l (72 Hours)	NOEC50, algae, Selenastrum capricornutum	560 mg/l (96 Hours)	
CSEO50, daphnia, Daphnia magna 7.8 mg/l (21 days) LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) ErC50, algae 830 μg /l (72 Hours)	2,2'-iminodiethanol, diethanolamine (111-42-2		
LC50, fish, Pimephales promelas 1460 mg/l (96 Hours) EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) ErC50, algae 830 μg /l (72 Hours)	EC50, algae, Pseudokirchneriella subcapitata	2.2 mg/l (Hours)	
EC50, daphnia, Daphnia magna 55 mg/l (48 Hours) Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) ErC50, algae 830 μg /l (72 Hours)	CSEO50, daphnia, Daphnia magna	7.8 mg/l (21 days)	
Protease (Subtilisin) (9014-01-1) EC50, daphnia 586 μg /l (48 Hours) ErC50, algae 830 μg /l (72 Hours)	LC50, fish, Pimephales promelas	1460 mg/l (96 Hours)	
EC50, daphnia 586 μg /l (48 Hours) ErC50, algae 830 μg /l (72 Hours)	EC50, daphnia, Daphnia magna	55 mg/l (48 Hours)	
ErC50, algae 830 µg /l (72 Hours)	Protease (Subtilisin) (9014-01-1)		
	EC50, daphnia	586 µg /l (48 Hours)	
LC50, fish 8,2 mg/l (96 Hours)	ErC50, algae	830 µg /l (72 Hours)	
	LC50, fish	8,2 mg/l (96 Hours)	

12.2. Persistence and degradability

2-methoxymethylethoxypropanol (34590-94-8)		
2-methoxymethylethoxypropanor (34390-94-0)		
Persistence and degradability	Biodegradable.	
Biodegradation	77 - 84 % 28 days	
Alkyl polyglucoside C10-16 (110615-47-9)		
Persistence and degradability	Readily biodegradable.	
Amines, coco alkyldimethyl, N-oxides (61788-90-7)		
Persistence and degradability	Readily biodegradable.	

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Amines, coco alkyldimethyl, N-oxides (61788-90-7)			
Biodegradation	> 80 % (OECD 302 B)		
Triethanolamine (102-71-6)			
Persistence and degradability	Readily biodegradable.		
3-butoxypropan-2-ol, propylene glycol monol	outyl ether (5131-66-8)		
Persistence and degradability	Biodegradable.		
Biodegradation	60 - 90 % 28 days		
2,2'-iminodiethanol, diethanolamine (111-42-2	2,2'-iminodiethanol, diethanolamine (111-42-2)		
Persistence and degradability	Readily biodegradable.		
BOD (% of ThOD)	90 - 100 % ThOD 28 days(OECD 301F method)		
Protease (Subtilisin) (9014-01-1)			
Persistence and degradability	Readily biodegradable.		
12.3. Bioaccumulative potential			

ENZYFOAM			
Log Pow	Not tested		
2-methoxymethylethoxypropanol (34590-94-8)			
Bioaccumulative potential	Not expected.		
Triethanolamine (102-71-6)			
Bioaccumulative potential	Low bioaccumulation potential.		
3-butoxypropan-2-ol, propylene glycol monob	3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)		
Bioconcentration factor (BCF REACH)	3,2		
Bioaccumulative potential	Not expected.		
2,2'-iminodiethanol, diethanolamine (111-42-2)			
Log Pow	-2,18 (OECD Guideline 107)		
Bioaccumulative potential	Low bioaccumulation potential.		
Protease (Subtilisin) (9014-01-1)			
Log Pow	< 0		
Bioaccumulative potential	Not bioaccumulable.		

12.4. Mobility in soil

2-methoxymethylethoxypropanol (34590-94-8)		
Ecology - soil	Soluble in water.	
Triethanolamine (102-71-6)		
Ecology - soil	Soluble in water.	
3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)		
Ecology - soil	Soluble in water.	
2,2'-iminodiethanol, diethanolamine (111-42-2)		
Ecology - soil	Soluble in water.	

12.5. Results of PBT and vPvB assessment

Component	
2-methoxymethylethoxypropanol (34590-94-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Protease (Subtilisin) (9014-01-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Triethanolamine (102-71-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2,2'-iminodiethanol, diethanolamine (111-42-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Amines, coco alkyldimethyl, N-oxides (61788-90-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Remove to an authorized waste treatment plant.
Sewage disposal recommendations	:	May be discharged to wastewater treatment installation.

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Waste disposal recommendations : Dispose of contents/container to hazardous or special waste collection point. WHEN TOTALLY

EMPTY, containers are recyclable like any other packing.

Ecology - waste materials : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Avoid release to the environment.

European List of Waste (LoW) code : 20 01 29* - detergents containing dangerous substances

H code : H4 - 'Irritant': non-corrosive substances and preparations which, through immediate, prolonged

or repeated contact with the skin or mucous membrane, can cause inflammation.

R code/ D code : D9 - Physico-chemical treatment not specified elsewhere in this Annex which results in final

compounds or mixtures which are discarded by means of any of the operations numbered D 1

to D 12 (e.g. evaporation, drying, calcination, etc.)

SECTION 14: Transport information

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

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

14.6.2. Transport by sea

14.6.3. Air transport

14.6.4. Inland waterway transport

Not subject to ADN : No

14.6.5. Rail transport

Carriage prohibited (RID) : No

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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 regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

ENZYFOAM is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Detergent Regulation : Labelling of contents:

3	
Component	%
non-ionic surfactants	5-15%
phosphonates	<5%
enzymes	

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

	Supersedes	Added	
	Date of issue	Modified	
	Revision date	Modified	
2.1	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	Labelling according to Directive 67/548/EEC or 1999/45/EC	Removed	
2.2	Labelling according to Regulation (EC) No. 1272/2008 [CLP]	Added	

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Resp. Sens. 1	Sensitisation — Respiratory, category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H226	Flammable liquid and vapour	
H302	Harmful if swallowed	
H312	Harmful in contact with skin	
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	

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H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects
R22	Harmful if swallowed
R36/38	Irritating to eyes and skin
R37/38	Irritating to respiratory system and skin
R38	Irritating to skin
R41	Risk of serious damage to eyes
R42	May cause sensitization by inhalation
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed
R50	Very toxic to aquatic organisms
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

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

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