EnziQure
Safety Data Sheet
according to Regulation (EC) No. 453/2010
Date of issue: 26-07-17 Version: 0.0

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

1.1. Product identifier

Product form : Mixture
Product name : EnziQure
Product code : OL20707
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

OneLIFE S.A.
Avenue Albert Einstein, 15
B-1348 Louvain-la-Neuve - Belgium
T +32 (0)10 48 34 27 - F +32 (0)10 45 63 63
info@onelife-bf.com - www.onelife-bf.com

1.4. Emergency telephone number

Emergency number : Int+32-70-245.245

Country	Organisation/Company	Address	Emergency number	Comment
	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	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]

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : 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 : Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts; 2-Ethylhexanol ethoxylate; C6 Alkyl Glucoside; alcohols, C12-C15, ethoxylated, propoxylated
Hazard statements (CLP) : H318 - Causes serious eye damage
Precautionary statements (CLP) : P280 - Wear eye protection, face protection
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician
EUH-statements : EUH208 - Contains subtilisin, Lipase, amylase, α-. May produce an allergic reaction

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-Ethylhexanol ethoxylate	(CAS-No.) 26468-86-0	5 - 15	Xi; R41	Eye Dam. 1, H318
C6 Alkyl Glucoside	(CAS-No.) 54549-24-5 (EC-No.) 259-217-6 (REACH-no) 01-2119492545-29	5 - 15	Xi; R41	Eye Dam. 1, H318
alcohols, C12-C15, ethoxylated, propoxylated	(CAS-No.) 120313-48-6	1 - 5	Xi; R41 Xi; R38 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	(CAS-No.) 68439-57-6 (EC-No.) 270-407-8 (REACH-no) 01-2119513401-57	1 - 5	Xi; R41 Xi; R38	Skin Irrit. 2, H315 Eye Dam. 1, H318
subtilisin	(CAS-No.) 9014-01-1 (EC-No.) 232-752-2 (EC Index-No.) 647-012-00-8 (REACH-no) 01-2119480434-38	0.1 - 1	Xi; R41 Xi; R37/38 R42	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
amylase, α-	(CAS-No.) 9000-90-2 (EC-No.) 232-565-6 (EC Index-No.) 647-015-00-4 (REACH-no) 01-2119938627-26	0.1 - 1	R42	Resp. Sens. 1, H334
Lipase	(CAS-No.) 9001-62-1 (EC-No.) 232-619-9 (REACH-no) 01-2119972939-13	0.1 - 1	R42	Resp. Sens. 1, H334
Diphenyl oxide substance with a Community workplace exposure limit	(CAS-No.) 101-84-8 (EC-No.) 202-981-2	< 0.1	N; R51/53	Aquatic Chronic 2, H411

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If on skin, take off contaminated clothing. Wash clothing before re-using. 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 : Rinse 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/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

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

Symptoms/effects after eye contact : Redness, pain. Blurred vision.

Symptoms/effects 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 media allowed.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not combustible.
Explosion hazard : Product is not explosive.
Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon monoxide. Carbon dioxide.

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.
Emergency procedures : Evacuate area.

6.1.2. For emergency responders

Protective equipment : Personal protection. See Heading 8. Equip cleanup crew with proper protection.
Emergency procedures : Stop leak if safe to do so. Mark the danger area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Dike for recovery or absorb with appropriate material.
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. 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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide for a tub to collect spills.
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

subtilisin (9014-01-1)		
Belgium	Limit value (mg/m³)	0,00006 mg/m³
pin-2 (3)-ene (80-56-8)		
Belgium	Local name	Essence de térébenthine et monoterpènes sélectionés # Terpentijn en geselecteerde monoterpenen
Belgium	Limit value (ppm)	20 ppm
Diphenyl oxide (101-84-8)		
EU	Local name	Diphenyl ether
EU	IOELV TWA (mg/m³)	7 mg/m³
EU	IOELV TWA (ppm)	1 ppm

Diphenyl oxide (101-84-8)		
EU	IOELV STEL (mg/m³)	14 mg/m³
EU	IOELV STEL (ppm)	2 ppm
Belgium	Local name	Oxyde de diphényle (vapeur) # Difenyloxide (damp)
Belgium	Limit value (mg/m³)	7 mg/m³
Belgium	Limit value (ppm)	1 ppm
Belgium	Short time value (mg/m³)	14 mg/m³
Belgium	Short time value (ppm)	2 ppm

8.2. Exposure controls

Appropriate engineering controls:

Ensure adequate air ventilation.

Personal protective equipment:

Safety glasses.

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:

No special clothing/skin protection equipment is recommended under normal conditions of use.

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

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	:	orange. Dark.
Odour	:	Citrus fruits.
Odour threshold	:	Not determined
pH	:	7 - 8
Relative evaporation rate (butylacetate=1)	:	The product has not been tested
Melting point	:	The product has not been tested
Freezing point	:	The product has not been tested
Boiling point	:	The product has not been tested
Flash point	:	The product has not been tested
Critical temperature	:	The product has not been tested
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not applicable
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	The product has not been tested

Relative vapour density at 20 °C	:	The product has not been tested
Relative density	:	1,02 - 1,12
Solubility	:	Material highly soluble in water.
Log Pow	:	The product has not been tested
Viscosity, kinematic	:	The product has not been tested
Viscosity, dynamic	:	The product has not been tested
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Not applicable.
Explosive limits	:	No data available

9.2. Other information

Additional information : None

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

In the event of fire, may decompose : Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

2-Ethylhexanol ethoxylate (26468-86-0)	
LD50 oral	2000 - 5000 mg/kg
LD50 dermal	2000 - 5000 mg/kg
LC50 inhalation rat (mg/l)	> 20 mg/l

alcohols, C12-C15, ethoxylated, propoxylated (120313-48-6)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
LD50 oral rat	> 2000 mg/m³

subtilisin (9014-01-1)	
LD50 oral	1800 mg/kg bodyweight

amylase, α- (9000-90-2)	
LD50 oral	> 2000 mg/kg (OECD TG 401,420)

Lipase (9001-62-1)	
LD50 oral	> 2000 mg/kg bodyweight (OECD 401,420)

Diphenyl oxide (101-84-8)	
LD50 oral rat	2450 mg/kg
LD50 oral	3450 mg/kg
LD50 dermal rabbit	5000 mg/kg

Skin corrosion/irritation : Not classified
pH: 7 - 8

Serious eye damage/irritation : Causes serious eye damage.
pH: 7 - 8

Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	:	Not classified
Chronic aquatic toxicity	:	Not classified

C6 Alkyl Glucoside (54549-24-5)	
LC50, Fish, Oncorhynchus mykiss (Rainbow trout)	> 100 mg/l (96 Hours)
EC50, daphnia, Daphnia magna	> 100 mg/l (48 Hours)
EC50, algae, Scenedesmus quadricauda	> 100 mg/l (72 Hours)
EC50	> 1000 mg/l (4 Hours)

2-Ethylhexanol ethoxylate (26468-86-0)	
LC50, Fish	13 mg/l (96 Hours)
EC50, daphnia, Daphnia magna	6,5 mg/l (48 Hours)
EC50, algae, Scenedesmus subspicatus	6,6 mg/l (72 Hours)
EC50	680 mg/l (4 Hours)

alcohols, C12-C15, ethoxylated, propoxylated (120313-48-6)	
LC50 fish 1	0,1 - 1 mg/l (Branchydanio rerio)(OECD 203 method)
LC50, Fish, Branchydanio rerio	0,1-1 mg/l (96 Hours)
EC50, aquatic invertebrates	1-10 mg/l (48 Hours)
EC50, algae, acute, Scenedesmus subspicatus	0.1-1 mg/l (72 Hours, (OCDE 201))
EC10, microorganisms, Pseudomonas putida	> 1000 mg/l
EC10, long term, Scenedesmus subspicatus	0.1 - 1 mg/l

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
LC50 fish 1	1 - 10 mg/l

subtilisin (9014-01-1)	
EC50, daphnia	586 µg /l (48 Hours)
ErC50, algae	830 µg /l (72 Hours)
LC50, fish	8,2 mg/l (96 Hours)

amylase, α- (9000-90-2)	
EC50, daphnia	31,7 - 457 mg/l (48 Hours, (OCDE 202))
ErC50, algae	≥ 5,2 mg/l (72 Hours, (OCDE 201))
LC50, fish	58,3 - 326,7 mg/l (96 Hours, (OCDE 203))

Lipase (9001-62-1)	
EC50, daphnia	> 37,4 mg/l (48 Hours, (OCDE 202))
ErC50, algae	> 18 mg/l (72 Hours, (OCDE 201))
LC50, fish	> 68,3 mg/l (96 Hours, (OCDE 203))

Diphenyl oxide (101-84-8)	
LC50, daphnia, Daphnia magna	0.11 mg/l (48 Hours)
LC50, fish, Pimephales promelas	4 mg/l (96 Hours)

12.2. Persistence and degradability

C6 Alkyl Glucoside (54549-24-5)	
Persistence and degradability	Biodegradable.

2-Ethylhexanol ethoxylate (26468-86-0)	
Persistence and degradability	Biodegradable. Not established.

alcohols, C12-C15, ethoxylated, propoxylated (120313-48-6)	
Persistence and degradability	Biodegradable.
Biochemical oxygen demand (BOD)	0,31 g O_2/g substance
Chemical oxygen demand (COD)	2,215 g O_2/g substance
Biodegradation	>= 90 % Biodegradable.

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
Persistence and degradability	Biodegradable.

subtilisin (9014-01-1)	
Persistence and degradability	Biodegradable.

amylase, α- (9000-90-2)	
Persistence and degradability	Biodegradable.

Lipase (9001-62-1)	
Persistence and degradability	Biodegradable.

12.3. Bioaccumulative potential

EnziQure	
Log Pow	The product has not been tested

C6 Alkyl Glucoside (54549-24-5)	
Bioaccumulative potential	Slightly or not bioaccumulative.

2-Ethylhexanol ethoxylate (26468-86-0)	
Bioaccumulative potential	Slightly or not bioaccumulative. Not established.

alcohols, C12-C15, ethoxylated, propoxylated (120313-48-6)	
Bioaccumulative potential	Slightly or not bioaccumulative.

subtilisin (9014-01-1)	
Log Pow	< 0
Bioaccumulative potential	not bioaccumulable.

amylase, α- (9000-90-2)	
Log Pow	< 0
Bioaccumulative potential	not bioaccumulable.

Lipase (9001-62-1)	
Log Pow	< 0
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

alcohols, C12-C15, ethoxylated, propoxylated (120313-48-6)	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

Component	
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
amylase, α- (9000-90-2)	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
C6 Alkyl Glucoside (54549-24-5)	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.

Product/Packaging 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 30 - detergents other than those mentioned in 20 01 29

HP 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

ADR	IMDG	IATA	ADN	RID
14.1. UN 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. Transport in bulk according to Annex II of Marpol 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 REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Allergenic fragrances > 0,01%:

d,l-Limonene

Detergent Regulation : Labelling of contents:

Component	%
non-ionic surfactants	5-15%
anionic surfactants	<5%
enzymes	
BENZYL BENZOATE	
METHYLISOTHIAZOLINONE	
OCTYLISOTHIAZOLINONE	
perfumes	
D-LIMONENE	

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

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

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
EUH208	Contains . May produce an allergic reaction

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