

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

1.1. Product identifier

Product form : Mixture
Product name : ENZYMIX L
UFI : Y44X-600U-Q008-1T3N
Product code : LIQ0519
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. S.A.
Avenue Albert Einstein, 15
BE- B-1348 Louvain-la-Neuve
Belgium
T +32 (0)10 45 30 00 - F +32 (0)10 45 63 63
info@realco.be - www.realco.be

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]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

EUH-statements : EUH208 - Contains Beta-glucanase, LIPASE. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

No additional information available

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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	1 - 5	Not classified
Isotridecylalcohol, ethoxylated, sulfated, sodium salt	CAS-No.: 150413-26-6	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Beta-glucanase	CAS-No.: 62213-14-3 EC-No.: 263-462-4	0.1 - 1	Resp. Sens. 1, H334
Lipase	CAS-No.: 9001-62-1 EC-No.: 232-619-9 REACH-no: 01-2119972939-13	0.1 - 1	Resp. Sens. 1, H334

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 general	: Take off immediately all contaminated clothing. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air. Allow affected person to breathe fresh air.
First-aid measures after skin contact	: Wash with plenty of water/...
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth.

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

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Cough.
Symptoms/effects after skin contact	: Redness. Repeated or prolonged skin contact may cause irritation.
Symptoms/effects after eye contact	: Redness, pain.
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 flammable.
-------------	------------------

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Explosion hazard	: Product is not explosive.
Reactivity in case of fire	: None.
Hazardous decomposition products in case of fire	: Thermal decomposition generates : Carbon oxides (CO, CO ₂).

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	: Dike for recovery or absorb with appropriate material.
------------------	--

6.1.1. For non-emergency personnel

Protective equipment	: Personal protection. See Heading 8.
Emergency procedures	: Avoid all contact with skin, eyes, or clothing. Evacuate area.

6.1.2. For emergency responders

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

6.2. Environmental precautions

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. Rinse with plenty of water.
Other information	: Spill area may be slippery. Never return spills in original containers for possible later re-use.

6.4. Reference to other sections

See Heading 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin and eyes. 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

Storage conditions	: Store in original container. Keep container closed when not in use.
Incompatible products	: None to our knowledge.
Incompatible materials	: None to our knowledge.
Storage temperature	: 4 – 25 °C
Heat and ignition sources	: Store away from direct sunlight or other heat sources.
Information on mixed storage	: Keep away from food, drink and animal feeding stuffs.
Storage area	: Store in dry, cool, well-ventilated area.
Packaging materials	: PEHD.

7.3. Specific end use(s)

Septictank.

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

2-methoxymethylethoxypropanol (34590-94-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	(2-Methoxymethylethoxy)-propanol
IOEL TWA	308 mg/m ³
IOEL TWA [ppm]	50 ppm
Remark	Skin
Belgium - Occupational Exposure Limits	
Local name	Dipropylèneglycolmonométhyléter # Dipropyleenglycolmonomethylether
OEL TWA	308 mg/m ³
OEL TWA [ppm]	50 ppm
Remark	D: La mention D signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air. # De vermelding D betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure adequate ventilation.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

None necessary. Avoid contact with eyes

8.2.2.2. Skin protection

Skin and body protection:

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

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hand protection:

In case of repeated or prolonged contact wear gloves. EN 374

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

Thermal hazard protection:

No specific measures are necessary.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Blue.
Odour	: No data available
Odour threshold	: Not determined
pH	: 7,5 – 8,5
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
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	: 1,002 – 1,102
Solubility	: Material highly soluble in water.
Partition coefficient n-octanol/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	: None.
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.

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

In the event of fire, may decompose : Carbon oxides (CO, CO₂).

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-methoxymethylethoxypropanol (34590-94-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg

Beta-glucanase (62213-14-3)

LD50 oral	> 2000 mg/kg (OECD TG 401,420)
-----------	--------------------------------

Lipase (9001-62-1)

LD50 oral	> 2000 mg/kg bodyweight (OECD 401,420)
-----------	--

Skin corrosion/irritation : Not classified
pH: 7,5 – 8,5
Serious eye damage/irritation : Not classified
pH: 7,5 – 8,5
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

ENZYMIX L

Viscosity, kinematic	The product has not been tested
----------------------	---------------------------------

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

2-methoxymethylethoxypropanol (34590-94-8)

LC50, Fish, Pimephales promelas	> 10000 mg/l (96 Hours)
EC50, daphnia, Daphnia magna	> 100 mg/l (48 Hours)
EC50, algae	> 100 mg/l (72 Hours)

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Beta-glucanase (62213-14-3)	
EC50, daphnia	> 100 mg/l (48 Hours)
ErC50, algae	> 100 mg/l (72 Hours)
LC50, fish	> 100 mg/l (96 Hours)

Lipase (9001-62-1)	
LC50 - Fish [1]	> 68,3 mg/l (OECD 203 method)
EC50 - Crustacea [1]	> 37,4 mg/l (OECD 202 method)
ErC50 algae	> 18 mg/l (OECD 201 method)
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))

12.2. Persistence and degradability

2-methoxymethylethoxypropanol (34590-94-8)	
Persistence and degradability	Biodegradable.
Biodegradation	77 – 84 % 28 days

Isotridecylalcohol, ethoxylated, sulfated, sodium salt (150413-26-6)	
Persistence and degradability	Biodegradable.

Beta-glucanase (62213-14-3)	
Persistence and degradability	Biodegradable.

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

12.3. Bioaccumulative potential

ENZYMIX L	
Partition coefficient n-octanol/water (Log Pow)	The product has not been tested

2-methoxymethylethoxypropanol (34590-94-8)	
Bioaccumulative potential	Slightly or not bioaccumulative.

Beta-glucanase (62213-14-3)	
Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	not bioaccumulable.

Lipase (9001-62-1)	
Partition coefficient n-octanol/water (Log Pow)	< 0
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

2-methoxymethylethoxypropanol (34590-94-8)	
Ecology - soil	Soluble in water.

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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
Beta-glucanase (62213-14-3)	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	: Avoid release to the environment.
European List of Waste (LoW) code	: 20 01 30 - detergents other than those mentioned in 20 01 29
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 / IMDG / IATA / ADN / RID

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				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

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

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Beta-glucanase ; Lipase ; Isotridecylalcohol, ethoxylated, sulfated, sodium salt	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Detergent Regulation (648/2004/EC): Labelling of contents:	
Component	%
polycarboxylates, anionic surfactants	<5%
enzymes	

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

Indication of changes			
Section	Changed item	Change	Comments
1.1	UFI	Added	
15.1	REACH Annex XVII	Added	

Full text of H- and EUH-statements:

EUH208	Contains Beta-glucanase, LIPASE. May produce an allergic reaction.
--------	--

ENZYMIX L

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements:

EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2

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.