

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ENZYFOAM
Product code : LIQ0896

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

No additional information available

1.3. Details of the supplier of the safety data sheet

REALZYME
S Pioneer BLVD, 223
Springboro, - OH 45066 - United States of America
T +1 937 350 56 60 - F +1 937 350 56 60
info@realzyme.com - www.realzyme.com

1.4. Emergency telephone number

Emergency number : +1- 800 - 222 - 1222 (United States only) 011-32-70-245-245 (Canada and all other areas)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Pure Product H315

Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1 H318

Product used at recommended concentration (1%)

Not classified as hazardous.

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Pure Product

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Contains : Amines, coco alkyldimethyl, N-oxides; Alkyl polyglucoside C10-16; D-Glucopyranose, oligomers, decyl octyl glycosides
Hazard statements (GHS-US) : H315 - Causes skin irritation
H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/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/doctor/...
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse

Product used at recommended concentration (1%)

Labelling not applicable. Product not classified as hazardous.

2.3. Other hazards

No additional information available

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Alkyl polyglucoside C10-16	(CAS No) 110615-47-9	5 - 15	Skin Irrit. 2, H315 Eye Dam. 1, H318
3-butoxypropan-2-ol, propylene glycol monobutyl ether	(CAS No) 5131-66-8	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Amines, coco alkyldimethyl, N-oxides	(CAS No) 61788-90-7	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	1 - 5	Eye Dam. 1, H318

Full text of 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. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove victim to fresh air. Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Flush with plenty of water. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately call a POISON CENTER or doctor/physician. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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. Causes skin irritation. Irritation.
Symptoms/injuries after eye contact	: Redness, pain. Blurred vision. Causes serious eye damage. Serious damage to eyes.
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. Sand. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: None. 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.
Reactivity	: Stable under normal conditions of storage, handling and use.

5.3. Advice for firefighters

Precautionary measures fire	: Wear proper protective equipment.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 : Ventilate spillage area. Evacuate area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. See Heading 8.2. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Mark out the contaminated area with signs and prevent access to unauthorized personnel. Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or 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 absorbent material. Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite or kieselguhr. Dilute residue with water. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Spill area may be slippery. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. 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 only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Alkyl polyglucoside C10-16 (110615-47-9)

Not applicable

Amines, coco alkyldimethyl, N-oxides (61788-90-7)

Not applicable

D-Glucopyranose, oligomers, decyl octyl glycosides (68515-73-1)

Not applicable

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)

Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate air ventilation. Ensure good ventilation of the work station.
- Personal protective equipment : Safety glasses. Mist formation: aerosol mask with filter type P3. Gloves. Avoid all unnecessary exposure.



- Materials for protective clothing : Use chemically protective clothing.
- Hand protection : In case of repeated or prolonged contact wear gloves. (EN 134). Wear protective gloves.
- Eye protection : Eye protection (standard EN 166). Chemical goggles or safety glasses. Safety glasses.
- Skin and body protection : Use chemically protective clothing and boots (type PVC). Wear suitable protective clothing.
- 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 ensure that maintenance cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. In case of inadequate ventilation wear respiratory protection.
- Thermal hazard protection : Not applicable.
- Environmental exposure controls : Prevent entry to sewers and public waters. Avoid release to the environment. 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. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : light brown
- Odour : characteristic
- Odour threshold : Not established.
- pH : 7.3 - 8.3
- Melting point : Not applicable
- Freezing point : Not tested
- Boiling point : Not tested
- Flash point : Not tested
- Relative evaporation rate (butylacetate=1) : Not tested
- Flammability (solid, gas) : Not applicable
- Explosive limits : No data available
- Explosive properties : Not applicable.
- Oxidising properties : Not applicable.
- Vapour pressure : Not tested
- Relative density : 980 - 1080
- Relative vapour density at 20 °C : Not tested
- Solubility : Material highly soluble in water.
- Log Pow : Not tested
- Auto-ignition temperature : Not applicable
- Decomposition temperature : Not applicable
- Viscosity : No data available
- Viscosity, kinematic : Not tested
- Viscosity, dynamic : Not tested

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

9.2. Other information

Additional information : None

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions of storage, handling and use. Not established.

10.3. Possibility of hazardous reactions

None under normal conditions. Not established.

10.4. Conditions to avoid

None. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

None under normal conditions. Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal conditions. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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
ATE US (oral)	2700.000 mg/kg bodyweight
ATE US (dermal)	2000.000 mg/kg bodyweight
ATE US (vapours)	651.000 mg/l/4h
ATE US (dust,mist)	651.000 mg/l/4h

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

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : Cough.

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

Symptoms/injuries after eye contact : Redness, pain. Blurred vision. Causes serious eye damage. Serious damage to eyes.

Symptoms/injuries after ingestion : Abdominal pain, nausea.

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

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

Alkyl polyglucoside C10-16 (110615-47-9)	
LC50 fish 1	10 - 100 mg/l
Additional ecotoxicological information	EC0, microorganisms: > 100 mg/l

Amines, coco alkyldimethyl, N-oxides (61788-90-7)	
Additional ecotoxicological information	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))

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
Additional ecotoxicological information	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)

12.2. Persistence and degradability

ENZYFOAM	
Persistence and degradability	Not established.

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.
Biodegradation	> 80 % (OECD 302 B)

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
Persistence and degradability	Biodegradable.
Biodegradation	60 - 90 % 28 days

12.3. Bioaccumulative potential

ENZYFOAM	
Log Pow	Not tested
Bioaccumulative potential	Not established.

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
Bioconcentration factor (BCF REACH)	3.2
Bioaccumulative potential	Not expected.

12.4. Mobility in soil

3-butoxypropan-2-ol, propylene glycol monobutyl ether (5131-66-8)	
Ecology - soil	Soluble in water.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

Product at recommended concentration (1%) : Non-hazardous for the environment (non-hazardous mixture)

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. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : May be discharged to wastewater treatment installation.

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Product at recommended concentration (1%) : Non-hazardous for the environment. No special requirements needed for sewage disposal.

Waste disposal recommendations : WHEN TOTALLY EMPTY, containers are recyclable like any other packing. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point.

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

Product at recommended concentration (1%) : Non-hazardous for the environment. No special requirements needed for waste disposal.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Alkyl polyglucoside C10-16 (110615-47-9)

EPA TSCA Regulatory Flag

N - N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used
P - P - indicates a commenced PMN substance

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 04/17/2015

Other information : None.

ENZYFOAM

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-statements:

H226	Flammable liquid and vapour
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

NFPA health hazard

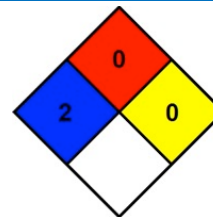
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 0 Minimal Hazard - Materials that will not burn

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection

: B

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

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