

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ENZYMIX-L
Product code : LIQ0519

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

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

Respiratory sensitisation, H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Category 1

Product used at recommended concentration

Not classified as hazardous.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P284 - [In case of inadequate ventilation] wear respiratory protection
P304+P341 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing
P342+P311 - If experiencing respiratory symptoms: Call a poison center/doctor/...
P501 - Dispose of contents/container to hazardous or special waste collection point

Product used at recommended concentration

Labelling not applicable. Product not classified as hazardous.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	GHS-US classification
Isotridecylalcohol, ethoxylated, sulfated, sodium salt	(CAS-No.) 150413-26-6	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
amylase, α -	(CAS-No.) 9000-90-2	0.1 - 1	Resp. Sens. 1, H334

Full text of hazard classes and H-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). Call a poison center or a doctor if you feel unwell.
- 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 experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash skin 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. Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after inhalation : Cough. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Symptoms/effects after skin contact : May cause moderate irritation.
- Symptoms/effects after eye contact : Redness, pain.
- Symptoms/effects after ingestion : Abdominal pain, nausea.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : All extinguishing media allowed. Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : None.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable.
- Explosion hazard : Product is not explosive.
- Reactivity : Stable in use and storage conditions as recommended in item 7.

5.3. Special protective equipment and precautions for fire-fighters

- 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. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.1.1. For non-emergency personnel

- Protective equipment : Personal protection.
- Emergency procedures : Ventilate spillage area. Avoid all contact with skin, eyes, or clothing. Evacuate area. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. Personal protection. See Heading 8. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Stop leak if safe to do so.

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6.2. Environmental precautions

Avoid release to the environment. No special recommendation.

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. 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. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. 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. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in original container. Store in a well-ventilated place. Keep cool.
- Incompatible products : None to our knowledge.
- Storage temperature : 4 - 25 °C
- Heat and ignition sources : Store away from direct sunlight or other heat sources.
- Storage area : Keep away from food, drink and animal feeding stuffs.
- Packaging materials : PEHD.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isotridecylalcohol, ethoxylated, sulfated, sodium salt (150413-26-6)

Not applicable

amylase, α- (9000-90-2)

Not applicable

8.2. Appropriate engineering controls

- Appropriate engineering controls : No special protection required where adequate ventilation is maintained. Ensure good ventilation of the work station.
- Environmental exposure controls : No special recommendation. Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

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

Eye protection:

Eye protection (standard EN 166). Safety glasses

Skin and body protection:

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

Respiratory protection:

None necessary. Wear respiratory protection

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Thermal hazard protection:

None necessary.

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	: Pine
Odour threshold	: Not determined
pH	: 5.5 - 6.5
Melting point	: Not applicable
Freezing point	: The product has not been tested
Boiling point	: The product has not been tested
Critical temperature	: Not applicable
Flash point	: The product has not been tested
Relative evaporation rate (butylacetate=1)	: The product has not been tested
Relative evaporation rate (ether=1)	: The product has not been tested
Flammability (solid, gas)	: Not applicable Not applicable.
Vapour pressure	: The product has not been tested
Relative vapour density at 20 °C	: Not applicable
Relative density	: 0.97 - 1.07
Solubility	: Material highly soluble in water.
Log Pow	: The product has not been tested The product has not been tested
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive limits	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Not applicable.

9.2. Other information

No additional information available

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

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

10.4. Conditions to avoid

Direct sunlight.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

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

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified pH: 5.5 - 6.5
Serious eye damage/irritation	: Not classified pH: 5.5 - 6.5
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Cough. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: May cause moderate irritation.
Symptoms/effects after eye contact	: Redness, pain.
Symptoms/effects after ingestion	: Abdominal pain, nausea.

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.
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amylase, α - (9000-90-2)

Additional ecotoxicological information	EC50, daphnia: 31,7 - 457 mg/l (48 Hours, (OCDE 202)) ErC50, algae: \geq 5,2 mg/l (72 Hours, (OCDE 201)) LC50, fish: 58,3 - 326,7 mg/l (96 Hours, (OCDE 203))
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12.2. Persistence and degradability

Isotridecylalcohol, ethoxylated, sulfated, sodium salt (150413-26-6)

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

Persistence and degradability	Biodegradable.
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12.3. Bioaccumulative potential

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Log Pow	The product has not been tested
Log Kow	The product has not been tested

amylase, α - (9000-90-2)

Log Pow	< 0
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.

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

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : May be discharged to wastewater treatment installation.
Product/Packaging disposal recommendations : WHEN TOTALLY EMPTY, containers are recyclable like any other packing.
Ecology - waste materials : Avoid release to the environment.

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

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Not applicable

Air transport

Not applicable

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 except for:

amylase, α - (9000-90-2)

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

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 : 04/15/2015

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Full text of H-statements:

H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

NFPA health hazard

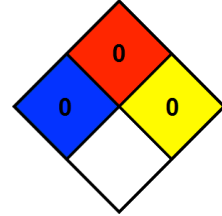
: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



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