

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : BIOREM® CDA1
Product code : LIQ1183

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 H318

Serious eye damage/eye irritation, Category 1

Product used at recommended concentration (0,25%)

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 : 2-Ethylhexanol ethoxylate; C6 Alkyl Glucoside
Hazard statements (GHS-US) : H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection
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/...

Product used at recommended concentration (0,25%)

Labeling not applicable. Product not classified as hazardous.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
2-Ethylhexanol ethoxylate	(CAS No) 26468-86-0	15 - 30	Eye Dam. 1, H318
C6 Alkyl Glucoside	(CAS No) 54549-24-5	15 - 30	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. Wash clothing before re-using. 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. Allow the victim to rest.
- First-aid measures after skin contact : Flush with plenty of water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
- First-aid measures after eye contact : 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. 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 : Redness. Repeated or prolonged skin contact may cause 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. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation. Sweep or shovel spills.

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. Personal protection. 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. Evacuate unnecessary personnel. Ventilate area.

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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. Clean up any spills as soon as possible, using an absorbent material to collect it. Dilute residue with water. Rinse with plenty of 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 : Use suitable disposal containers. 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. 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

- Technical measures : Install a retention tank.
- 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 : None, to our knowledge. Strong bases. Strong acids.
- Incompatible materials : metals. Sources of ignition. Direct sunlight.
- Storage temperature : 4 - 25 °C
- Special rules on packaging : Do not store in corrodable metal.
- Packaging materials : PEHD.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

C6 Alkyl Glucoside (54549-24-5)

Not applicable

2-Ethylhexanol ethoxylate (26468-86-0)

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. Gloves. Avoid all unnecessary exposure.



- 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 : 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. Wear appropriate mask.
- Thermal hazard protection : Not applicable.
- Environmental exposure controls : Avoid release to the environment. Prevent entry to sewers and public waters. Avoid release to the environment.

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Other information : Provide local exhaust or general room ventilation to minimize exposure to dust. The equipment must be cleaned thoroughly after each use. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. 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 yellow
Odour : characteristic
Odour threshold : No data available
pH : 9 - 10
Melting point : Not applicable
Freezing point : Not tested
Boiling point : Not tested
Critical temperature : Not tested
Flash point : Not tested
Relative evaporation rate (butylacetate=1) : Not applicable
Relative evaporation rate (ether=1) : Not applicable
Flammability (solid, gas) : Not applicable
Explosive limits : No data available
Explosive properties : Product is not explosive.
Oxidising properties : Not applicable.
Vapour pressure : Not tested
Relative density : 1.1 - 1.2
Relative vapour density at 20 °C : No data available
Solubility : Material highly soluble in water.
Log Pow : Not tested
Not tested
Auto-ignition temperature : Not tested
Decomposition temperature : Not tested
Viscosity : No data available
Viscosity, kinematic : Not tested
Viscosity, dynamic : Not tested

9.2. Other information

No additional information available

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

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

10.4. Conditions to avoid

None, to our knowledge. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

None, to our knowledge. Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity : Not classified

2-Ethylhexanol ethoxylate (26468-86-0)

LC50 inhalation rat (mg/l)	> 20 mg/l
Skin corrosion/irritation	: Not classified pH: 9 - 10
Serious eye damage/irritation	: Causes serious eye damage. pH: 9 - 10
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	: Redness. Repeated or prolonged skin contact may cause 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.

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.

C6 Alkyl Glucoside (54549-24-5)

Additional ecotoxicological information	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)
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2-Ethylhexanol ethoxylate (26468-86-0)

Additional ecotoxicological information	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)
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12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable. Not established.
Biodegradation	> 95 % (OECD 302B method)

C6 Alkyl Glucoside (54549-24-5)

Persistence and degradability	Readily biodegradable.
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2-Ethylhexanol ethoxylate (26468-86-0)

Persistence and degradability	Readily biodegradable. Not established.
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12.3. Bioaccumulative potential

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Log Pow	Not tested
Log Kow	Not tested
Bioaccumulative potential	Not established.

C6 Alkyl Glucoside (54549-24-5)

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

Bioaccumulative potential	Slightly or not bioaccumulative. Not established.
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12.4. Mobility in soil

No additional information available

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 (0,25%) : 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.

Product at recommended concentration (0,25%) : Non-hazardous for the environment. No special requirements needed for sewage disposal.

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

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 (0,25%) : 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.

C6 Alkyl Glucoside (54549-24-5)

EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance
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2-Ethylhexanol ethoxylate (26468-86-0)

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))
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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 : 27/07/2016

Other information : None.

Full text of H-statements:

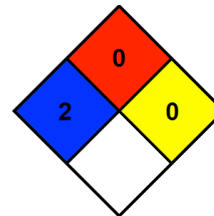
H318

Causes serious eye damage

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.



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