

Issue Date 07-Aug-2022

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Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Bio-Zyme

Other means of identification

Product Code 1423

Recommended use of the chemical and restrictions on use

Recommended use Odor eliminator.
Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Company Name Blue Cardinal Chemical, LLC
3670 Scarlet Oak Blvd.
St. Louis, MO 63122
800-325-3312

Emergency telephone number

Emergency Telephone CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA REGULATORY STATUS

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Serious eye damage/eye irritation

Category 2

Label elements

Emergency Overview

WARNING

Hazard statements

Causes serious eye irritation.



Appearance: No data available

Physical state: Liquid

Odor: Pleasant



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician. Specific Treatment (See Section 4 on the SDS). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

Precautionary Statements - Disposal

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Hazards not otherwise classified (HNOC)**Other Information**

- Harmful to aquatic life with long lasting effects.
- Harmful to aquatic life.

Unknown Acute Toxicity

11.44 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS
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CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
Viable Bacteria	Proprietary	7-13	*
Nonylphenol Polyethylene Glycol Ether	127087-87-0	1-5	*

***The exact percentage (concentration) of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

First aid measures**Skin Contact**

Wash off immediately with plenty of water. Wash off immediately with plenty of water for at least 15 minutes. Wash off immediately with soap and plenty of water. If skin irritation persists, see a physician.

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation

Remove to fresh air.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effect, both acute and delayed**Symptoms**

Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions Do not allow into any storm sewer drains, lakes, streams, ponds, estuaries, oceans or other surface water bodies. Should not be released into the environment. Dispose of according to all local city, state and federal rules and regulations.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citral 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	-

Appropriate engineering controls**Engineering Controls**

Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

Skin and body protection

No Information available. Wear protective gloves and protective clothing if needed.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	No Information available Free flowing powder.
Color	Blue
Odor	Pleasant
Odor threshold	No Information available

Property**Values**

pH	7.0 - 9.0
Specific Gravity	1.01
Viscosity	Water Thin
Melting point/freezing point	No Information available
Flash point	No Information available
Boiling point / boiling range	No Information available
Evaporation rate	No Information available
Flammability (solid, gas)	No data available
Flammability Limits in Air	
Upper flammability limit:	No Information available
Lower flammability limit:	No Information available
Vapor pressure	No Information available
Vapor density	No Information available
Water solubility	Complete
Partition coefficient	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available

Other Information

Density Lbs/Gal	8.4
VOC Content (%)	0.02

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Inhalation	No data available. Avoid breathing vapors or mists.
Eye contact	Severely irritating to eyes.
Skin Contact	No data available. Avoid contact with skin.
Ingestion	No data available. Not an expected route of exposure. Do not taste or swallow.

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
Nonylphenol Polyethylene Glycol Ether 127087-87-0	= 1310 mg/kg (Rat) = 2590 mg/kg (Rat)	= 2 mL/kg (Rabbit) = 1780 µL/kg (Rabbit)	-

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No Information available.
Germ cell mutagenicity	No Information available.
Carcinogenicity	No Information available.
Reproductive toxicity	No Information available.
STOT - single exposure	No Information available.
STOT - repeated exposure	No Information available.
Chronic toxicity	No Information available.
Target organ effects	No Information available.
Aspiration hazard	No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 11.44 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	64,069 mg/kg
ATEmix (dermal)	43,900 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

CHEMICAL NAME	ALGAE/AQUATIC PLANTS	FISH	CRUSTACEA
Citral 5392-40-5	16: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 19: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50	-	7: 48 h <i>Daphnia magna</i> mg/L EC50
Orange Terpenes 5989-27-5	-	0.619 - 0.796: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 35: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	-
Phenol, 2-methoxy-4-(2-propenyl) 97-53-0	-	13: 96 h <i>Danio rerio</i> mg/L LC50 semi-static	-

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects

No Information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CHEMICAL NAME	SARA 313-THRESHOLD VALUES %
Nonylphenol Polyethylene Glycol Ether - 127087-87-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product has been evaluated and does not require warning labeling under California Proposition 65.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Dipropylene Glycol 25265-71-8	-	-	x
Orange Terpenes 5989-27-5	x	-	-
Acid Blue Dye 3844-45-9	-	x	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	1	Flammability	0	Instability	0	Physical and Chemical Properties	-
<u>HMS</u>	Health hazards	1	Flammability	0	Physical Hazards	0	Personal protection	x

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Revision Note

N/A = Not Applicable; N/D = Not Determined

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet