



SAFETY DATA SHEET

1. Identification of Substance and Manufacturer:

Prezyme Concentrate PCN: 242

Use: Enzymatic presoak. Dilute as directed.

Manufacturer : L&R Manufacturing Company, 577 Elm Street, P.O. Box 607 Kearny, NJ 07032-0607 USA.

Publication Date: 3/27/2014

REV: K

Product information call 201-991-5330 www.lrultrasonics.com

For emergencies involving a spill, leak fire or accident contact CHEMTREC 800-424-9300 with the United States. Or (01) 703-527-3887 (USA) for International collect calls.

2. HAZARDS IDENTIFICATION



WARNING! IRRITANT. MAY BE HARMFUL IF SWALLOWED.

Physical appearance and odor: Yellow liquid with mild enzyme odor.

A: WARNING STATEMENT: Good industrial hygiene practices should be used when handling this material.

Acute Eyes: Direct contact causes irritation, redness and possible tearing.

Acute Skin: Prolonged or repeated contact causes redness, and drying of the skin.

Acute Inhalation: Breathing high concentrations of vapors or mists may cause irritation to the nose and throat.

Acute Ingestion: Acute Ingestion: Will cause irritation to the digestive tract and signs of nervous system depression.

B: POTENTIAL HEALTH EFFECTS:

Chronic Effects: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogen.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Percentage	Component	CAS Number	Percentage
Water	7732-18-5	60 – 70	Mixed C8 Amphocarboxylates	68610-44-6	15 - 30
Nonylphenol, ethoxylated	9016-45-9	1 - 10	1,2 Propanediol	57-55-6	1 – 10
Bacterial Protease	9014-01-1	1 – 10	Sodium Tetraborate	1303-96 - 4	1 – 5

The exact concentration of composition has been withheld as a trade secret

4. FIRST AID MEASURES

Eye Exposure: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin Exposure: Wash thoroughly with water. If irritation or redness develops, seek medical attention.

Inhalation: If respiratory irritation or distress occurs, move victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion: Seek immediate medical attention. INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA: NOT COMMBUSTIBLE

Suitable Extinguishing Media: Extinguish with dry chemical, CO₂ or a BC/ABC extinguisher.

Special Fire Fighting Procedures: None known

Unusual Fire and Explosion Hazards: Closed containers may explode due to build up of pressure when exposed to extreme heat.

Hazardous Decomposition Materials: (under fire conditions) None known

6. ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Mop up spill and dispose of by dilution to a sanitary sewer system as permitted by local, state and federal regulations.

Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 40 to 100° F. Protect from freezing

HANDLING: AVOID CONTACT WITH SKIN, EYES OR CLOTHING

8. EXPOSURE CONTROL/PERSONAL PROTECTION

General: These recommendations provide general guidance for handling of this product. Because specific work environments and material handling

practices vary, safety procedures should be developed for each intended application. When developing safe handling procedures, do not overlook the need to clean and dispose of the material. Waste resulting from the use of this product should be handled in accordance with Section 13: Disposal Considerations.

Exposure Guidelines: Exposure limits are recommended worker breathing limits. The following limits apply to this material:

<u>INGREDIENTS</u>	<u>LIMITS</u>	<u>INGREDIENTS</u>	<u>LIMITS</u>
Mixed C8 Amphocarboxylates	None established	Nonylphenol, ethoxylated	10 mg/m3 TWA AIHA
1,2 Propanediol	TWA:10 mg/m3 AIHA	Sodium Tetraborate	5 mg/m3 TWA
Bacterial Protease	0.1 x 106Au/ m3		

Engineering Controls: Normal room ventilation. AIHA WEEL: TWA 10 mg/m3, aerosol.

Respiratory Controls: For reasonable uses of this material, respiratory protection should not be necessary.

Eye/Face Protection: Safety glasses to protect from splashing.

Skin Protection: Rubber or plastic gloves to avoid drying and irritation to the skin.

Work Practice Control: Normal hygiene in the work area should be taken when working with or handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid.

pH: 9 to 10 as concentrate

Water Solubility: Soluble, may haze slightly

Freezing Point Range: Approx. 24 ° F

Vapor Pressure: Not established

Flash Point: None to boiling **Method:** Tag Closed Cup

Flammability limits (vol/vol %): Lower: No Data Upper: No Data

Percent volatile by volume: Approx. 75 % by volume **V.O.C. (calculated):** For Concentrate 0.7 lb/gal = 91.8 g/l, for used as directed: 0.005 lb/gal = 0.72 g/l.

Color: Yellow

Specific Gravity: 1.08

Melting Point Range: Not available

Boiling Point: approx. 210 ° F.

Vapor Density: Not established

Odor: Mild enzyme odor.

Odor Threshold: Not available

Evaporation Rate: Not available

Partition Coefficient; n-octanol / water: Not available

Decomposition Temperature: Not available

Auto Ignition Temperature: Not available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to be avoided: Protect from freezing.

Materials/Chemicals to be avoided: None known

Decomposition Type: Thermal None known

Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.

Acute Skin Irritation: No test data found for product.

Acute Dermal Toxicity: No test data found for product.

Acute Respiratory Irritation: No test data found for product.

Acute Inhalation Toxicity: No test data found for product.

Acute Oral Toxicity:

LD50(rat) =24 g/kg for C8 Amphocarboxylates

LD50 (rat) = 20 gm/kg for 1,2 Propanediol

LD50 (rat) = 1600 mg/kg for Nonylphenol, ethoxylated

LD50 (rat) = 2660mg/kg for Sodium Tetraborate

LD50 (rat) = 983 mg/kg For Bacterial

Chronic Toxicity: This product does not contain any substances that are considered by OSHA, NTP, IARC OR

ACGIH to be a probable or suspected human carcinogen. No additional test data was found for this product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data found.

13. DISPOSAL CONSIDERATIONS

This product can be disposed in sanitary sewer system, with dilution, where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

This product is not regulated for D.O.T. shipping. Do not stack cartons more than five high.

15. REGULATORY INFORMATION

Inventory Issues: All components of this product are listed on the U.S. TSCA, Canadian DSL, European EINECS/ELINS chemical listings

16. OTHER INFORMATION

National Fire Protection Association

Hazard Rating, NFPA

Health

Flammability

Reactivity

Special

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MSDS CHANGES

REV

DATE

DESCRIPTION OF CHANGE

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4/23/2013

Updated

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3/27/2014

SDS format

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