



MATERIAL SAFETY DATA SHEET

PREZYME CONCENTRATE

PCN(s) 242

Publication Date: 2/26/09

REV: H

1. SUPPLIER AND EMERGENCY INFORMATION Emergency Phone Numbers:

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

Product Information
Call: **201-991-5330**
www.lrultrasonics.com

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

2. HAZARDS IDENTIFICATION

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
Mix of C9-11 Ethoxylates	68439-46-3	1 - 10	1,2 Propanediol	57-55-6	1 - 10
Bacterial Protease	9014-01-1	1 - 10	Sodium Tetraborate	1303-96 - 4	1 - 5

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: Biodegradable product. 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	Mix of C9-11 Ethoxylates	None established
1,2 Propanediol	None established	Sodium Tetraborate	None established

Bacterial Protease

0.1 x 106Au/ m3

Engineering Controls: Normal room ventilation.

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):** 0.7 lb/gal = 91.8 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) =Unknown for Mixed C8 Amphocarboxylates

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

LD50 (mouse) = 1387 mg / .kg for Mix of C9-11 Ethoxylates

LD50 (rat) = 2660/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 is biodegradable and 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

2

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MSDS CHANGES

REV

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DATE

8/22/07

2/26/09

DESCRIPTION OF CHANGE

REVIEW / ANSI Z400.1-2004 format

Reviewed / deleted PCN#

Disclaimer: The information herein is given in good faith but no warranty expressed or implied is made.

Prepared By: L&R Manufacturing Company

Date: 02/26/09

Product Name: **PREZYME CONCENTRATE**