



MATERIAL SAFETY DATA SHEET

PREZYME CONCENTRATE

PCN(s): 241,242

Publication Date: 11/ 28 /05

REV: E

1. SUPPLIER AND EMERGENCY INFORMATION

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

Product Information
Call: 201-991-5330

Emergency Phone Numbers:

For emergencies involving a spill, leak, fire or accident contact:
CHEMTREC - 800-424-9300
within the United States or 703-527-3887
for international collect calls

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Percentage
Water	7732-18-5	60-70
Mixed C8 Amphocarboxylates	Unknown	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	1113-12-4	1 - 5

3. 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.

B: POTENTIAL HEALTH EFFECTS:

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

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

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:

FLASH POINT: NOT COMBUSTIBLE

METHOD USED: Tag Closed Cup

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

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 burst 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>INGREDIEN</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 10 ⁶ Au/ m ³		

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 Appearance: Yellow liquid

pH: 9-10 as concentrate

Water Solubility: Complete

Freezing Point Range: 24 °F

Vapor Pressure: Not established

Percent volatile by volume: Approx. 75 % by volume

Odor: Enzyme odor

Specific Gravity: 1.08

Melting Point Range: Not available

Boiling Point : Approx. 210 degrees F

Vapor Density: Not established

VOC (calc.) = 0.7 lb/gal = 91.8 g/l

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions as described in Section 7.

Conditions to be avoided: Protect from freezing.

Materials/Chemicals to be avoided: None known.

Decomposition type: Thermal None known

Hazardous Polymerization: WILL NOT OCCUR

Avoid the following to inhibit hazardous polymerization: NOT APPLICABLE.

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.

Acute Skin Irritation: May cause irritation to the skin.

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 Protease

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 a sanitary sewer system where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

It is NOT regulated as hazardous. 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
2

Flammability
0

Reactivity
0

General
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DATE
11/28/05

MSDS CHANGES
DESCRIPTION OF CHANGE
Reissued

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

Prepared By: L&R Manufacturing Company
Product Name: **PREZYME CONCENTRATE**

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