

SAFETY DATA SHEET

UltraDose Enzyme Plus Ultrasonic Cleaning Solution PCN: UD038

Use: Ultrasonic Cleaning Solution, diluted 1 part to 128 parts of water. Publication Date: 1/23/2018 Rev: New

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

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.

1. HAZARDS IDENTIFICATION



WARNING! IRRITANT. HARMFUL IF SWALLOWED.

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: 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
Water	7732-18-5	45-65
Disodium Cocoamphodiacetate	68650-39-5	8-18
Propylene Glycol	57-55-6	8 - 18
Enzyme Blend (Protease, Lipase, Amylase)	9014-01-1, 9001-62-1, 9013-01-8	2- 9
Disodium Cocoamphodipropionate	68604-71-7	1 -5
Sodium Tetraborate	1303-96 - 4	0.4-1.0
Monoethanolamine	141-43-5	0.01-0.4
Dodecanedioic acid	111-20-6	0.01-0.5
Mint Fragrance	NA	0.01-.0.06
FD & C Blue 1	3844-45-9	<.1

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 COMBUSTIBLE

Suitable Extinguishing Media: Extinguish fire in area 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 buildup of pressure when exposed to extreme heat.

Hazardous Decomposition Materials: Under fire conditions, oxides of nitrogen, carbon and sulfur

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.

Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 39 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:

INGREDIENTS	LIMITS	INGREDIENTS	LIMITS
Water	None established	Disodium Cocoamphodiacetate	None established
Protease	DNEL = 0.2% w/w	Propylene Glycol	AIHA TWA 10mg/m ³

Disodium Cocoamphodipropionate	None established	Monoethanolamine	OSHA/PEL TWA 3 ppm
Sodium Tetraborate	5 mg/m3 TWA	Dodecanedioic Acid	None established
Mint Fragrance	None established	Amylase	Not applicable
Lipase (inhalable particles)	ACGIH TLV TWA 10 mg/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	Color: Green	Odor: Mint
pH: 8.5 as concentrate	Specific Gravity: 1.07	Odor Threshold: Not available
Water Solubility: Soluble	Melting Point Range: Not available	Evaporation Rate: Similar to water
Freezing Point Range: < 32 °F	Boiling Point: NA	Partition Coefficient; n-octanol / water: Not available
Vapor Pressure: Not established	Vapor Density: Not established	Decomposition Temperature: Not available
Flash Point: None to boiling	Method: Tag Closed	Auto Ignition Temperature: Not available
Flammability limits (vol/vol %): Lower: No Data Upper: No Data		Refractive Index: 27.5
V.O.C. for concentrate (calculated): <100 g/l, VOC for dilution (1:128) < 0.8 gm/l.		

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to be avoided: Heat and freezing.

Materials/Chemicals to be avoided: Unknown

Decomposition Type: Thermal: Oxides of carbon, nitrogen and sulfur.

Possibility of Hazardous Reactions: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.

Acute Skin Irritation: Irritating to 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: Acute Oral Toxicity: LD50 (rat) > 5g/kg for Disodium Cocoamphodiacetate,

LD50 (rat) > 500 mg / kg for Disodium Cocoamphodipropionate,

LD50 (rat) 3400 mg kg-1 LD50 (rat) = 2660mg/kg for Sodium Tetraborate, Dodecanedioic acid

LD50 (rat) = 1720 mg/kg for Monoethanolamine, LD50 1800 mg/kg for Protease

LD50 (rabbit) = 18500 mg/kg for propylene glycol ,

LD50 (rat) 7500 mg/kg for Amylase, LD50 (rat) 10400 mg/kg for Lipase ,

>3000 mg/kg for Dodecanedioic acid

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 transportation. 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	0	0	--

MSDS CHANGES

<u>REV</u>	<u>DATE</u>	<u>DESCRIPTION OF CHANGE</u>
	1/23/18	New

This UltraDose Enzyme Plus SDS is given in good faith, but no warranty expressed or implied is made.