



Safety Data Sheet

Issue Date 08-Aug-2011

Revision Date: 10-Feb-2014

Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Liquid Enzyme Presoak

Other Means of Identification

Product Code 311500

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Dishwashing pretreatment. For industrial use.

Details of the Supplier of the Safety Data Sheet

Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number

Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Blue Green

Physical State Liquid

Odor None

Classification

Serious Eye Damage/Eye Irritation	Category 2 Sub-Category B
Aspiration Hazard	Category 2

Signal Word

Warning



Hazard Statements

Causes eye irritation.
Maybe harmful if swallowed and enters airways.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.

Precautionary Statements - Response

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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, or national regulations.

Other Hazards

None known

Unknown Acute Toxicity

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	40-70
Propylene Glycol	57-55-6	15-40
Sodium Citrate	6132-04-3	1-5
Sodium Tetraborate	12179-04-3	1-5
Linear Primary Alcohol Ethoxylate	68439-46-3	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES**First Aid Measures**

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation develops or persists seek medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove to fresh air. Inhalation of enzyme mist may cause allergic respiratory reactions, including asthma, in susceptible individuals on repeated exposure.
Ingestion	Clean mouth with water and drink afterwards plenty of water. If any discomfort persists, obtain medical attention.

Most Important Symptoms and Effects

Symptoms	Prolonged or repeated exposure can remove natural skin oils and may produce irritation. Persons with pre-existing eye, skin, or respiratory conditions might be more sensitive.
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Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician	Treat symptomatically. May aggravate pre-existing skin disorders.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**Water spray (fog). Carbon dioxide (CO₂). Water. Foam.**Unsuitable Extinguishing Media**

Not determined.

Specific Hazards Arising from the Chemical

None known.

Hazardous Combustion Products

Normal products of combustion.

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** Wear protective clothing as described in Section 8 of this safety data sheet.
- Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information. See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

- Methods for Containment** Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
- Methods for Clean-Up** Contain and collect with an inert absorbent and place into an appropriate container for disposal. Rinse area with clean water and dry before permitting traffic.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

- Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. For industrial and commercial use only. Avoid contact with skin, eyes or clothing.

Conditions for Safe Storage, Including Any Incompatibilities

- Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from freezing. Keep out of the reach of children.
- Incompatible Materials** None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium Tetraborate (particles not otherwise regulated) 12179-04-3	2mg/m ³	Total Dust: 15mg/m ³ Respirable Fraction: 5mg/m ³	-
Sodium Citrate (particles not otherwise regulated) 6132-04-3	TWA: 10mg/m ³ - inhalable particles TWA: 3mg/m ³ - respirable particles	TWA: 15mg/m ³ Total Dust TWA: 5mg/m ³ -respirable fraction	-

Appropriate Engineering Controls

- Engineering Controls** Ensure adequate ventilation, especially in confined areas. Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

- Eye/Face Protection** Eye protection should be used when splashing may occur.
- Skin and Body Protection** Wear protective gloves when handling this product.
- Respiratory Protection** Under normal conditions, respirator is not normally required.
- General Hygiene Considerations** 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	Odor	None
Appearance	Clear	Odor Threshold	Not determined
Color	Blue Green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH (concentrate)	10.0-10.5	
Melting Point/Freezing Point	Approximately 32°F	
Boiling Point/Boiling Range	Approximately 212°F	
Flash Point	Not applicable	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.03	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not an explosive	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Avoid excessive heat. Keep from freezing.

Incompatible Materials

Avoid contact with strong acids, oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition may produce oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene Glycol 57-55-6	22000 mg/kg (Rat)	21000 mg/kg (Rabbit)	-
Sodium Citrate 6132-04-3	>8000 mg/kg (Rat)	-	-
Sodium Tetraborate 12179-04-3	>3200 mg/kg (Rat)	-	-
Linear Primary Alcohol Ethoxylate 68439-46-3	1400 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects**Symptoms**

Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure**Carcinogenicity**

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene Glycol 57-55-6	19000mg/L (72hr) Algae	51400mg/L (96hr) Fathead minnow	-	18340mg/L (48hr) Daphnia
Sodium Citrate 6132-04-3	>18000mg/L (96hr) Chlorella vulgaris	>18000mg/L (96hr) Poecilia reticulata	>18000mg/L (8hr) Pseudomonas fluorescens	>5600mg/L (48hr) Daphnia
Sodium Tetraborate 12179-04-3	-	40mg/mL (96hr) Coho salmon (seawater)	-	133mg/L (48hr) Daphnia
Linear Primary Alcohol Ethoxylate 68439-46-3	0.95mg/L Algae	6mg/L (96hr) Fathead minnow	-	2.5mg/L (48hr) Daphnia

Persistence/Degradability

Not expected to persist.

Bioaccumulation

Not expected to bioaccumulate.

Mobility

Not determined

Other Adverse Effects

Not determined

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

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

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated. (NOI Non-Hazardous)
<u>IATA</u>	Not regulated.
<u>IMDG</u>	Not regulated.

15. REGULATORY INFORMATION

International Inventories

Not determined

Legend:

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

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

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations**CERCLA**

None Listed

SARA 311/312 Hazard Categories

Immediate (Acute) Health.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

None known.

US State Regulations

None known

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

The following ingredients appear on various state right to know lists and/or California's Proposition 65 List:

Chemical Name	State List
Propylene Glycol 57-55-6	PA

AZ- Arizona Ambient Air Quality Guidelines

CT- Connecticut Hazardous Air Pollutants

CA- California Director's List of Hazardous Substances

CAP65C- California Prop65 Carcinogen

FL- Florida Substances List

IL- Illinois Toxic Air Contaminant- Carcinogenic

MA- Massachusetts Right to Know List

MN- Minnesota Hazardous Substances List

NJ- New Jersey Right to Know List

PA- Pennsylvania Right to Know List

16. OTHER INFORMATION

NEPA**Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical Hazards****Personal Protection**

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Not determined

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Revision Note

Update format Version 1.0

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.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet