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

<table>
<thead>
<tr>
<th>Serious Eye Damage/Eye Irritation</th>
<th>Category 2 Sub-Category B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration Hazard</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

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.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-70</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>15-40</td>
</tr>
<tr>
<td>Sodium Citrate</td>
<td>6132-04-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Sodium Tetraborate</td>
<td>12179-04-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Linear Primary Alcohol Ethoxylate</td>
<td>68439-46-3</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**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.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician            
Treat symptomatically. May aggravate pre-existing skin disorders.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media


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

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Tetraborate (particles not otherwise regulated) 12179-04-3</td>
<td>2mg/m³</td>
<td>Total Dust: 15mg/m³ Respirable Fraction: 5mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Citrate (particles not otherwise regulated) 6132-04-3</td>
<td>TWA: 10mg/m³ inhalable particles TWA: 3mg/m³ respirable particles</td>
<td>TWA: 15mg/m³ Total Dust TWA: 5mg/m³ respirable fraction</td>
<td>-</td>
</tr>
</tbody>
</table>

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
### Property

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

#### 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**

**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.
### 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

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

#### 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

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT
Not regulated. (NOI Non-Hazardous)

IATA
Not regulated.

IMDG
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
- IECS - 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:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>PA</td>
</tr>
<tr>
<td>57-55-6</td>
<td></td>
</tr>
</tbody>
</table>

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 Contaminate- 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

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

| HMIS   |   |   |
|--------|   |   |
| Health Hazards | 1 |
| Flammability | 0 |
| Physical Hazards | 0 |

Issue Date: 08-Aug-2011
Revision Date: 10-Feb-2014
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