1. IDENTIFICATION

Product Identifier
Product Name United 455 LIQUI-ZYME

Other means of identification
SDS # UNITED-455

Recommended use of the chemical and restrictions on use.
Recommended Use Odor eliminator.
Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet
Supplier Address United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency Telephone Number
Company Phone Number 800-323-2594 (to reorder)
Emergency Telephone (24 hr) INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Appearance Liquid of various colors
Physical State Liquid

Odor Various: See Sect. 16

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Unknown Acute Toxicity
7.6% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which, at their given concentration, are considered to be hazardous to health.

4. FIRST-AID MEASURES
First Aid Measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention.

Skin Contact
Wash with soap and water. Seek medical attention if irritation develops.

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if irritation occurs.

Ingestion
Do not induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

Symptoms
May cause skin and eye irritation. Inhalation may cause irritation to nasal passages. Ingestion of large quantities (more than a few ounces) may cause upset stomach, diarrhea, nausea, and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical. Foam. Carbon dioxide (CO2). Water.

Unsuitable Extinguishing Media
Not determined

Specific Hazards Arising from the Chemical
Combustion products may be toxic.

Hazardous Combustion Products
Nitrogen oxides (NOx). Ammoniacal vapors.

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
Use personal protective equipment as required. Spills may be slippery.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up
This product is biodegradable. Dilute and wash remaining with water and dispose of in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
No exposure limits noted for ingredient(s).

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses.

Skin and Body Protection
Chemical resistant protective gloves.

Respiratory Protection
No protective equipment is needed under normal use conditions.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid of various colors</td>
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</tr>
<tr>
<td>Color</td>
<td>Various: See Sect. 16</td>
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<tr>
<td>pH</td>
<td>7-8</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
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</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100 °C / 212 °F</td>
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</tr>
<tr>
<td>Flash Point</td>
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<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
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<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
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</tr>
<tr>
<td>Lower Flammability Limit</td>
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<tr>
<td>Vapor Pressure</td>
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<td></td>
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<tr>
<td>Vapor Density</td>
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</tr>
<tr>
<td>Specific Gravity</td>
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<td>(Water = 1)</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
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<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
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</tr>
<tr>
<td>Auto-ignition Temperature</td>
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<tr>
<td>Decomposition Temperature</td>
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</tr>
<tr>
<td>Kinematic Viscosity</td>
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<td>Dynamic Viscosity</td>
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<tr>
<td>Explosive Properties</td>
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<tr>
<td>Oxidizing Properties</td>
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<tr>
<td>VOC Content</td>
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</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 does not occur.

**Conditions to Avoid**
Keep out of reach of children.

**Incompatible Materials**
Oxidizers such as bleach.

**Hazardous Decomposition Products**
Nitrogen oxides (NOx). Ammoniacal vapors.

### 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**

**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

**Unknown Acute Toxicity**
7.6% of the mixture consists of ingredient(s) of unknown toxicity.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Not determined.

**Persistence/Degradability**
Not determined.
Bioaccumulation  
Not determined

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

DOT  
Not regulated

IATA  
Not regulated

IMDG  
Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA  
Listed

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

US Federal Regulations

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.

US State Regulations

California Proposition 65  
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. State Right-to-Know Regulations  
Not determined
16. OTHER INFORMATION

**Additional Product Information**

Color/Scent:
- Light green liquid/Strong Cimarron (cinnamon-like) scent; Dark orange liquid/Fresh sunshine (botanical) scent; Slight green to colorless liquid/Newberry scent; Light green liquid/Unscented.

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<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
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<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
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<tr>
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**Issue Date:** 06-Nov-2012  
**Revision Date:** 24-Feb-2015  
**Revision Note:** New format

**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 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.

End of Safety Data Sheet