

Issue Date: 06-Nov-2012

Revision Date: 11-Apr-2017

Version 1

1. IDENTIFICATION

Product Identifier

Product Name United 455 LIQUI-ZYME

Other means of identification

SDS # UNITED-455-CA

Synonyms None

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

Initial Supplier Identifier

United Laboratories, Inc.
77 King Street West
Suite 3000, P.O. Box 95
TD Centre North Tower
Toronto, ON M5K 1G8
www.unitedlabsinc.as

Emergency Telephone Number

Initial supplier phone number 1-800-323-2594 (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 **Odour** Various: See Sect. 16

Classification

This chemical does not meet the hazardous criteria set forth by the 2015 WHMIS standards. 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.

Label Elements

None

Other Information

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Quaternary Ammonium	85409-23-0	0.5	-	-

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 doctor or poison control centre 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

Note to doctors	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.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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

Methods for cleaning up This product is biodegradable. Dilute and wash remaining with water and dispose of in accordance with federal, provincial and local regulations.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental 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

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Protect from freezing. Keep out of the reach of children.

Incompatible materials Oxidizers such as bleach.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be 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
Appearance	Liquid of various colors
Colour	Various: See Sect. 16
Odour	Various: See Sect. 16
Odour Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7-8	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	None	
Evaporation Rate	1	(Water = 1)
Flammability (Solid, Gas)	n/a-liquid	
Flammability Limits in Air		
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapour Pressure	17.5 mm Hg	
Vapour Density	Not determined	
Relative Density	0.990	(Water = 1)
Water Solubility	Soluble in water	
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	No information available.	
Oxidising properties	No information available.	

Other Information

Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

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 polymerisation does not occur.
Conditions to Avoid	Keep out of reach of children.
Incompatible Materials	Oxidisers 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	Do not inhale.
Ingestion	Do not ingest.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Numerical measures of toxicity

Acute Toxicity

Unknown acute toxicity No information available

Component Information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Not determined.
Persistence/Degradability	No information available.
Bioaccumulation	No information available.
Other Adverse Effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated.
<u>TDG</u>	Not regulated.
<u>IATA</u>	Not regulated.

IMDG**Marine Pollutant**

This material may meet the definition of a marine pollutant.

15. REGULATORY INFORMATION**REGULATORY INFORMATION****International Regulations****Ozone-depleting substances (ODS)** Not applicable.**Persistent Organic Pollutants** Not applicable.**Export Notification requirements** Not applicable.**International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Quaternary Ammonium	X	X	X		X			

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**AICS** - Australian Inventory of Chemical Substances**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

NFPA	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
HMIS	Health Hazards 0	Flammability 0	Physical hazards 0	Personal Protection B

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

* Skin designation

Issue Date: 06-Nov-2012**Revision Date:** 11-Apr-2017**Revision Note:** No information available.**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.

End of Safety Data Sheet