



MATERIAL SAFETY DATA SHEET

LABORATORIES

320 37th Avenue • St. Charles, Illinois 60174 • To Reorder, Call 800-323-2594

PRODUCT IDENTIFICATION UNITED 455 LIQUI-ZYME and SUNSHINE LIQUI-ZYME	USE / DESCRIPTION Odor Eliminator	REVISION DATE June 26, 2003	FOR MEDICAL AND TRANSPORTATION EMERGENCIES: INFOTRAC: 800-535-5053
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HEALTH (0 = Maximum Safety) **0**
 Always follow Label Directions and Cautions.
 4 Extreme. 3 High. 2 Moderate. 1 Slight. 0 Minimal.
See Health Hazard Data Section of this M.S.D.S. for more detailed information.

REACTIVITY (0 = Maximum Safety) **0**
 Susceptible to Release of Energy.
 4 May detonate-vacate area if Materials are exposed to fire.
 3 Strong shock of heat may detonate-use monitors from behind explosion resistant barriers.
 2 Violent chemical change possible-use hose stream from distance
 1 Unstable if heated-use precaution.
 0 Normally stable.

FLAMMABILITY (0 = Maximum Safety) **0**
 Susceptibility of Material to Burning.
 4 Extremely flammable. 1 Must be preheated to burn.
 3 Ignites at normal temperature. 0 Will not burn.
 2 Ignites when moderately heated.

PERSONAL PROTECTION



HAZARDOUS COMPONENTS IDENTITY, EXPOSURE LIMITS AND S.A.R.A. TITLE III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	ACGIH TWA	ACGIH STEL	OSHA PEL	OTHER RECOMMENDED LIMITS	S.A.R.A. TITLE III QUANTITIES
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In accordance with Federal Regulation 29 CFR 1910.1200, all materials in this product are considered non-hazardous.

This product does not contain materials reportable under SARA Title III Section 313.

This product does not contain materials regulated by California's Proposition 65.

This product is not controlled under Canada's WHMIS.

PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT 212° F	SPECIFIC GRAVITY (H₂O = 1) 0.990
VAPOR PRESSURE (mm Hg.) (At 77° F.) Approximately 17.5 mmHg	MELTING POINT Not determined
VAPOR DENSITY (Air = 1) Not determined	EVAPORATION RATE (Water = 1) Approximately 1.0
SOLUBILITY IN WATER 100% soluble	VOLATILE ORGANIC COMPOUNDS (V.O.C.) (Pounds Per Gallon Of Product) None
APPEARANCE AND ODOR LIQUI-ZYME: Light green color with strong cimarron (cinnamon-like) scent. and 455 SUNSHINE LIQUI-ZYME: Dark orange liquid with light fresh botanical scent.	pH: 7 - 8

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used) None (Tag Closed Cup)	FLAMMABLE LIMITS	LEL None	UEL None
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EXTINGUISHING MEDIA
 Dry chemical, dry foam, carbon dioxide, or water may be used.

SPECIAL FIRE FIGHTING PROCEDURES
 Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

UNUSUAL FIRE AND EXPLOSION HAZARDS
 None known

REACTIVITY DATA

STABILITY:	STABLE <input checked="" type="checkbox"/> UNSTABLE <input type="checkbox"/>	CONDITIONS TO AVOID None known
INCOMPATIBILITY (Materials To Avoid) Strong oxidizing agents		
HAZARDOUS DECOMPOSITION OR BYPRODUCTS When heated strongly, as in a fire, this product may produce, nitrous oxides and ammoniacal vapors		
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR <input checked="" type="checkbox"/> MAY OCCUR <input type="checkbox"/>	CONDITIONS TO AVOID None known	

HEALTH HAZARD DATA

HEALTH HAZARDS

EYES: May cause irritation. SKIN: Prolonged or repeated contact may cause irritation. INHALATION: Mists of this product may irritate nasal passages.

IF SWALLOWED: Swallowing large amounts (more than a few ounces) may cause nausea, upset stomach and vomiting.

CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

This product contains a chemical known to the state of California to cause cancer or reproductive toxicity? No

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES AND SKIN: May cause irritation or rash after prolonged contact. INHALATION: Coughing and irritation of nasal passages.

IF SWALLOWED: Nausea, upset stomach and vomiting.

TARGET ORGANS:

Eyes

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY OVEREXPOSURE

Pre-existing skin disorders and acute or chronic asthma.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Flush with tepid water for at least 15 minutes and call a physician or control poison center.

SKIN: Wash with soap and water. If irritation persists, call a physician or poison control center.

IF MIST IS INHALED: Remove patient to fresh air. If irritation persists call a physician or poison control center. IF SWALLOWED: Induce vomiting only

under the direction of a physician. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

If this material is released or spilled, flush it with water to the nearest sewer to drain. This product, when spilled on the floor, may also cause slippery conditions.

Remove with a wet vac or scrub area with scrubber or floor machine if available.

WASTE DISPOSAL METHOD

Consult your local, state and federal officials for proper disposal guidelines. Small amounts (several gallons) may usually be poured down sanitary sewers.

This is a non-toxic, biodegradable material.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep this product in a properly labeled, tightly closed container. Do not allow this product to freeze. Keep out of reach of children.

CONTROL MEASURES

FOR USE WHERE SIGNIFICANT EYE, SKIN OR INHALATION EXPOSURE IS LIKELY

RESPIRATORY PROTECTION (Specify Type)

Not normally required

VENTILATION: MECHANICAL (General)

Not normally required

LOCAL EXHAUST

Normal ventilation is usually adequate

PROTECTIVE GLOVES

Recommended only for prolonged or repeated exposure to the concentrated product.

EYE PROTECTION

Safety glasses are suggested when handling the concentrated product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Shirts with long sleeves are recommended.

WORK HYGENIC PRACTICES

Remove contaminated clothing; wash thoroughly with soap and water before reusing. Wash hands and face with soap and water after using this product.