



Ecological Laboratories INC.

Providing Aquatic Solutions Since 1976

MATERIAL SAFETY DATA SHEET

PRODUCT: MICROBE-LIFT/ Garlic Enhance

SECTION I: IDENTIFICATION

Manufactures Name: Ecological Laboratories, Inc.
Address: 2525 N.E. 9th Avenue
Cape Coral, FL 33909
Emergency Telephone: (800)424-9300 (outside the U.S.A. (202) 483-7616 collect)
Information Telephone: (800) 645-2976
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SECTION II: COMPOSITIONS/ INGREDIENTS

(Active Ingredient) Oil & water miscible natural extract of garlic (*Allium sativum L.*) which has been dissolved in Kosher Polysorbate 80 and glycerides.

SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: >100°C
Specific Gravity: varies
Vapor Pressure at 20°C (in mm of Hg): Not known
Vapor Density (air = 1): Not known
Solubility in Water: Completely
Viscosity: > 500 cps for the concentrate
Melting or Freezing Point: Not known
Evaporation Rate (n-butanol = 1): Not known
% Volatiles: Not determined
Appearance and Odor: A viscous, light to dark amber liquid with a pungent, acrid garlic odor.
pH: < 7

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Lower Flammability Limits (% in air): Not known
Flash Point (and methods): 183°F (Closed Cup)
Flammability Classification: Non-flammable
Recommended Extinguishing Media: Alcohol Foam; CO₂; Dry Chemical; Water
Special Fire Fighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water spray.
Unusual Fire/ Explosion Hazards: Products of combustion may be toxic.

SECTION V: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: None known
Incompatibility (materials to avoid): None known

Hazardous Decomposition or byproducts: Thermal decomposition may produce toxic vapors/fumes of carbon monoxide and/or carbon dioxide and other organic materials, and oxides of carbon and sulfur.

Hazardous Polymerization: Will not occur.

SECTION VI: HEALTH HAZARD DATA

Threshold Limit Value: Not known
Effects of Overexposure: No health effects information available. As with all products of unknown toxicity, avoid unnecessary exposure. Overexposure may aggravate existing conditions. No effects indicated.

Emergency First Aid Procedures: **Eye contact:** Immediately flush eyes with plenty of water for several minutes to remove and soothe the irritation that can result from the oleoresin contained in the extract. Get immediate medical attention if irritation develops.
Skin contact: Wash with plenty of running water, and a mild soap if available, for several minutes. Application of vegetable oil to the affected skin will usually soothe the irritation. Get immediate medical attention if irritation does not abate.
Ingestion: Immediately give 3-4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting does occur, give fluids again. Get immediate medical attention. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person. Ingestion of the pure oleoresin can cause severe irritation or death.
Inhalation: Remove from area to fresh air. Get immediate medical attention. If not breathing, clear airway and start artificial respiration. If victim is having trouble breathing, give supplemental oxygen, if available.

STATE WARNINGS: **California Proposition 65:** Components present in this material which the State of California has found to cause cancer, birth defects or other reproductive harm are as follows:

Chemical Name: Not known
CAS Number: Not applicable
Typical Maximum Concentration: Not known

Massachusetts Right-to-Know: The following components of this material are included in the Massachusetts Substance List and are present at or above reportable levels:

Chemical Name: Not known
CAS Number: Not applicable
Typical Maximum Concentration: Not known

Michigan Critical Materials: - The following components of this material are included in the Michigan Critical Materials List:

Chemical Name: Not known
CAS Number: Not applicable
Typical Maximum Concentration: Not known

New Jersey Right-to-Know: The following components of this material are included in the New Jersey Hazardous Substance List and are present at or above reportable levels:

Chemical Name: Not known
CAS Number: Not applicable
Typical Maximum Concentration: Not known

Pennsylvania Right-to-Know: The following components of this material are included in the Pennsylvania Hazardous Substance List and are present at or above reportable levels:

Chemical Name: Not known

CAS Number: Not applicable

Typical Maximum Concentration: Not known

SECTION VII: PRECAUTIONS FOR SAFE HANDLING, USE AND DISPOSAL

In Case of Fire:	CAUTION! Wear appropriate protective equipment and NIOSH/MSHA approved respirator where mists or vapors of unknown concentrations may be generated (self contained breathing apparatus preferred).
In Case of Spill or Accidental Release or Leak:	Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Spill may be washed to sanitary sewers; keep out of open bodies of water.
Waste Disposal Procedures:	Dispose of in compliance with all Federal, state and local laws and regulations. Incineration is the preferred method.
Container Disposal:	Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
Precautions:	Keep containers closed when not in use. Do not contaminate drinking water, food or feed by storage or disposal.

SECTION VIII: CONTROL MEASURES

Respiratory Protection:	In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.
Local Exhaust:	Recommended where mists may be generated.
Protective Gloves:	Use good industrial hygiene practices.
Eye Protection:	Use good industrial hygiene practices.
Other Protective Equipment:	Use good industrial hygiene practices.

SECTION IX: TOXICOLOGY INFORMATION

No toxicity information is available for this specific material.

SECTION X: REGULATORY INFORMATION

TSCA Section 12(b) Export Notification: Components present in this product which, if exported, could require either annual or onetime reporting under this regulation are as follows:

Chemical Name: None known

CAS Number: Not applicable

Concentration: Not applicable

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act of 1980): requires notification of the National Response Center (Telephone 800-424-8802) in the event of a release of quantities of hazardous materials contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs) listed in 40 CFR 302.4:

Chemical Name: Not known

CAS Number: Not known

Typical Maximum Concentration: Not applicable

SARA Title III Section 313: This act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities as listed in 40 CFR 372, are met or exceeded:

Chemical Name: None known

CAS Number: Not applicable
Concentration: Not applicable

SARA Title III, Sections 302/304 (Superfund Amendments and Reauthorization act of 1986): This act requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and release Reportable Quantities (RQs) listed for the Components in 40 CFR 355:

Chemical Name: Not known

CAS Number: Not known

Typical Maximum Concentration: Not applicable

SARA Title III Sections 311/312: - This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in 40 CFR 370:

Chemical Name: Not known

CAS Number: Not known

Hazard Categories*: None known

**The five hazard categories are as follows:*

F=FIRE HAZARD; S= SUDDEN RELEASE OF PRESSURE;

R=REACTIVE; A=IMMEDIATE (ACUTE) HEALTH HAZARD;

C=DELAYED (CHRONIC) HEALTH HAZARD

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