

SAFETY DATA SHEET

Product: Leafzyme

Revision date: 11/13/2023

1. Identification.

- (a) Product identifier used on the label; Leafzyme
- (b) Other means of identification; None
- (c) Recommended use of the chemical and restrictions on use;
 - Recommended use: Foliar Application
 - Restrictions on use: For agricultural/home garden use
- (d) Manufacturer Details;
 - Company: Tainio Biologicals, Inc.
 - Address: PO Box 19185
Spokane, Washington 99219
- (e) Emergency phone number; (509) 747-5471

2. Hazard(s) identification.

- (a) Classification of the chemical in accordance with paragraph (d) of §1910.1200; None.
- (b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200. (Hazard symbols may be provided as graphical reproductions in black and white or the name of the symbol, e.g., flame, skull and crossbones); None.
- (c) Describe any hazards not otherwise classified that have been identified during the classification process; No known hazard.
- (d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration $\geq 1\%$ and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity is required; No additional information available.

3. Composition/information on ingredients.

In accordance with paragraph (i) of §1910.1200 on trade secrets a statement that the specific chemical identity and/or exact percentage (concentration) of composition have been withheld as a trade secret as our product formulation is proprietary.

4. First-aid measures.

- (a) Description of first aid measures:
 - If inhaled: N/A
 - In case of skin contact: Irritation could occur with prolonged contact.
 - In case of eye contact: Flush with water for a few minutes
 - If swallowed: Excessive ingestion must occur before any health hazard
- (b) Most important symptoms/effects, acute and delayed; None expected under normal conditions of use.
- (c) Indication of immediate medical attention and special treatment needed, if necessary; None expected under normal conditions of use.



5. Fire-fighting measures.

- (a) Suitable (and unsuitable) extinguishing media; Non-flammable. Use extinguishing media appropriate for surrounding fire.
- (b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products); None known.
- (c) Special protective equipment and precautions for fire-fighters; Use protective clothing and breathing equipment appropriate for surrounding fire.

6. Accidental release measures.

- (a) Personal precautions, protective equipment, and emergency procedures; Non-toxic. Wash or wipe up.
- (b) Methods and materials for containment and cleaning up; Dilute with water and spray or spread on ground.

7. Handling and storage.

- (a) Precautions for safe handling; Avoid temperatures over 110F and below freezing. Avoid storing in direct sunlight.
- (b) Conditions for safe storage, including any incompatibilities; When storing product outside of its original container use only plastic or stainless steel containers. No known incompatibilities.

8. Exposure controls/personal protection.

- (a) OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available; No additional information available.
- (b) Appropriate engineering controls; No additional information available.
- (c) Individual protection measures, such as personal protective equipment; No additional information available.

9. Physical and chemical properties.

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| (a) Appearance (physical state, color, etc.); | Purple liquid |
| (b) Odor; | Vinegar aroma |
| (c) Odor threshold; | No data available |
| (d) pH; | No data available |
| (e) Melting point/freezing point; | No data available |
| (f) Initial boiling point and boiling range; | 100C |
| (g) Flash point; | No data available |
| (h) Evaporation rate; | No data available |
| (i) Flammability (solid, gas); | No data available |
| (j) Upper/lower flammability or explosive limits; | No data available |
| (k) Vapor pressure; | No data available |
| (l) Vapor density; | No data available |
| (m) Relative density; | No data available |
| (n) Solubility(ies); | No data available |
| (o) Partition coefficient: n-octanol/water; | No data available |
| (p) Auto-ignition temperature; | No data available |
| (q) Decomposition temperature; | No data available |
| (r) Viscosity. | No data available |



10. Stability and reactivity.

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| (a) Reactivity; | Product is stable under recommended storage conditions |
| (b) Chemical stability; | Stable if stored and applied as directed |
| (c) Possibility of hazardous reactions; | None known |
| (d) Conditions to avoid; | Direct sunlight
Extremely high or low temperatures |
| (e) Incompatible materials; | None known |
| (f) Hazardous decomposition products; | None known |

11. Toxicological information.

Description of the various toxicological (health) effects and the available data used to identify those effects, including:

- (a) Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);
- (b) Symptoms related to the physical, chemical and toxicological characteristics;
- (c) Delayed and immediate effects and also chronic effects from short and long-term exposure; and,
- (d) Numerical measures of toxicity (such as acute toxicity estimates);
 - (1) **Inhalation Irritation.** N/A;
 - (2) **Acute Oral Toxicity.** Excessive ingestion must occur before any health hazard results. Effects of overexposure may include nausea, vomiting, diarrhea, weakness, or convulsions;
 - (3) **Primary Skin Irritation.** N/A; and,
 - (4) **Acute Eye Irritation.** Immediate - slight erythema. One (1) hour – slight erythema. Twenty-four (24) hours – None.
- (e) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA; No additional information available.

12. Ecological information.

- (a) Ecotoxicity (aquatic and terrestrial, where available); No additional information available.
- (b) Persistence and degradability; No additional information available.
- (c) Bioaccumulative potential; No additional information available.
- (d) Mobility in soil; No additional information available.
- (e) Other adverse effects (such as hazardous to the ozone layer); No additional information available.

13. Disposal considerations.

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging; Triple rinse all empty containers. Do not reuse empty containers. Do not contaminate food or feed by storage or disposal.

14. Transport information.

- (a) UN number; No additional information available.
- (b) UN proper shipping name; No additional information available.
- (c) Transport hazard class(es); No additional information available.
- (d) Packing group, if applicable; No additional information available.
- (e) Environmental hazards (e.g., Marine pollutant (Yes/No)); No additional information available.
- (f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code); No additional information available.



(g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises; No additional information available.

15. Regulatory information.

Safety, health and environmental regulations specific for the product in question; No additional information available.

16. Other information, including date of preparation or last revision.

Prepared by: Tainio Biologicals, Inc.
Revision date: 11/13/2023

The information contained herein is based on our current knowledge and is provided in good faith to comply with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

