

SAFETY DATA SHEET

Product: Spectrum Revision date: 07/01/2016

1. Identification.

- (a) Product identifier used on the label; Spectrum
- (b) Other means of identification; None
- (c) Recommended use of the chemical and restrictions on use; Recommended use: Soil Amendment Restrictions on use: For agricultural use
- (d) Manufacturer Details; Company: Address:

Tainio Biologicals, Inc. PO Box 19185 Spokane, Washington 99219 (509) 747-5471

(e) Emergency phone number;

2. Hazard(s) identification.

(a) Classification of the chemical in accordance with paragraph (d) of §1910.1200; Nuisance dust.

(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:

> In case of skin contact: In case of eye contact: If swallowed:

Remove to fresh air Drink water to clear throat Wash with soap and water Flush with water Not hazardous when ingested



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(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; 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; Use a dust mask at strong dust development.

(b) Methods and materials for containment and cleaning up; Since the active components of this product are found naturally occurring in soils and/or lakes and ponds, the wash or rinse water can be disposed of on soil surfaces.

7. Handling and storage.

(a) Precautions for safe handling; Store below 120 degrees F.

(b) Conditions for safe storage, including any incompatibilities; Store away from direct sunlight, extremely high or low temperatures. 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; Approved (NIOSH/MSHA) respirator should be worn when exposed to strong dust development.

(b) Appropriate engineering controls; General ventilation is sufficient.

(c) Individual protection measures, such as personal protective equipment; Goggles or safety glasses are recommended.

9. Physical and chemical properties.

- (a) Appearance (physical state, color, etc.);
 (b) Odor;
 (c) Odor threshold;
 (d) pH;
 (e) Melting point/freezing point;
 (f) Initial boiling point and boiling range;
 (g) Flash point;
 (h) Evaporation rate;
 (i) Flammability (solid, gas);
 (j) Upper/lower flammability or explosive limits;
- (k) Vapor pressure;
- (I) Vapor density;
- (m) Relative density;

White/gray powder Characteristic No data available No data available



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(n) Solubility(ies);(o) Partition coefficient: n-octanol/water;(p) Auto-ignition temperature;

- (q) Decomposition temperature;
- (r) Viscosity.

10. Stability and reactivity.

(a) Reactivity;

(b) Chemical stability;

(c) Possibility of hazardous reactions;

(d) Conditions to avoid;

(e) Incompatible materials;

(f) Hazardous decomposition products;

No data available No data available No data available No data available No data available

Product is stable Stable if stored and applied as directed None known Direct sunlight Extremely high or low temperatures None known 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. Prolonged inhalation of dust may cause respiratory irritation;

(2) <u>Acute Oral Toxicity</u>. Laboratory test on rabbits fed 5,010 mg/Kg of body weight showed no toxic signs;

(3) <u>Primary Skin Irritation</u>. 0.5 milliliter applied diluted in a semi-occlusive dressing showed no skin reaction after 1, 2, 3, and 4 hour exposure; and,

(4) <u>Acute Eye Irritation</u>. Instilled diluted liquid and dry powder showed moderate discomfort, slight erythema, and copious discharge for the first hour and total clearing in 24, 48, and 72 hour tests.

(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.

Since the active components are found naturally occurring in soils, and lakes and ponds, it is generally considered inert in the environment. If any used product has become contaminated then based on the contaminants it should be evaluated accordingly.

(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.



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13. Disposal considerations.

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

(a) Since the active components are found naturally occurring in soils, and or lakes and ponds, the wash or rinse water can be disposed of on soil surfaces.

(b) 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: 07/01/2016

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.



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