TAINIO BIOLOGICALS, INC.

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SAFETY DATA SHEET

Product: PZ 1000

Revision date: 07/01/2016

1. Identification.

(a) Product identifier used on the label; PZ 1000
(b) Other means of identification; None
(c) Recommended use of the chemical and restrictions on use;

Recommended use:	Fertilizer
Restrictions on use:	For agricultural 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; Class-C Oxidizer.
(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); Warning.
(c) Describe any hazards not otherwise classified that have been identified during the classification process; None expected under normal conditions of use.
(d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration ≥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:	Remove to fresh air Drink water to clear throat
In case of skin contact:	Wash with soap and water
In case of eye contact:	Flush with water
If swallowed:	Drink plenty of water or milk

Do not induce vomiting

(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 flooding quantities of water. Do not use a water jet.
(b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products); This product, in its powder form, is considered a mild oxidizer and therefore increases the intensity of any fire.
(c) Special protective equipment and precautions for fire-fighters; Use full protective gear.

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; Sweep up. Prevent entry into waterways, sewers, basements, or confined areas.

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.);	Black and blue powder
(b) Odor;	Characteristic
(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;	No data available
(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.

(a) Reactivity;	Product is stable under recommended storage conditions May intensify fire
(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;	Strong acids
(f) Hazardous decomposition products;	Ammonia

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) Acute Oral Toxicity. Laboratory test on rabbits fed 5,109 mg/Kg of body weight showed no toxic signs.

(3) Primary Skin Irritation. 0.6 milliliter applied diluted in a semi-occlusive dressing showed no skin reaction after 1, 2, 3, and 4 hour exposure.

(4) Acute Eye Irritation. 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 data 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 data available.
(b) Persistence and degradability; No additional data available.
(c) Bioaccumulative potential; No additional data available.
(d) Mobility in soil; No additional data available.
(e) Other adverse effects (such as hazardous to the ozone layer); No additional data 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.

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

15. Regulatory information.

Safety, health and environmental regulations specific for the product in question; C – Oxidizer.

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.