



ROOTWISE SOIL DYNAMICS

TEL: 970-260-9156

PO BOX 1746

PAONIA, CO 81428

WWW.ROOTWISESOILDYNAMICS.COM

MATERIAL SAFETY DATA SHEET

PRODUCT: BIO-CATALYST

Publish Date: 2/15/2017

1. Identification

- (a) Product name used on label: Bio-Catalyst
- (b) Other means of identification: None
- (c) Recommended use of the chemical and restrictions on use:
 - Recommended use: SOIL AMENDMENT
 - Restrictions on use: AGRICULTURAL
- (d) Manufacturer Details: Rootwise Soil Dynamics PO BOX 1746 Paonia, CO 81428
- (e) Emergency phone number: 970-260-9156

2. Hazard(s) identification

- (a) Classification of the chemical in accordance with paragraph (d) of §1910.1200; Nuisance dust.
- (b) Hazard Symbol: NONE
- (c) Describe any hazards not otherwise classified: 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: Wash off
 - In case of eye contact: Flush immediately with water, repeat as necessary
 - If swallowed: N/A
- (b) Most important symptoms acute/delayed; None expected under normal conditions of use.
- (c) Indication of immediate medical attention: None expected under normal conditions of use.

5. Fire-fighting measures.

- (a) Extinguishing media: Non-Flammable
- (b) Hazards arising from combustion: None known.
- (c) Protective equipment for firefighters: Use protective clothing and breathing equipment.

6. Accidental release measures.

- (a) Personal precautions, protective equipment: None
- (b) Methods and materials for containment and clean up: Rinse water can be disposed of on soil surfaces.

7. Handling and storage.

- a) Store below 110 degrees F. and do not allow to freeze
- (b) Conditions for safe storage: Store away from direct sunlight, extreme high or low temperatures.

8. Exposure controls/personal protection.

- (a) No threshold for exposure.
- (b) Ventilation: General ventilation is sufficient.
- (c) Individual protection measures: None

9. Physical and chemical properties.

- | | |
|--|------------------------|
| (a) Appearance (physical state, color, etc.) | Clear to yellow liquid |
| (b) Odor | Earthy Vinegar Aroma |
| (c) Odor threshold | No Info |
| (d) pH | 2.5 or below |
| (e) Melting point/freezing point | No Info |
| (f) Initial boiling point and boiling range | 100C |
| (g) Flash point | No Info |
| (h) Evaporation rate | No Info |
| (i) Flammability (solid, gas) | No Info |
| (j) Upper/lower flammability or explosive limits; (k) Vapor pressure | No Info |
| (l) Vapor density | No Info |
| (m) Relative density | No Info |
| (n) Solubility | No Info |
| (o) Partition coefficient: n-octanol/water | No Info |
| (p) Auto-ignition temperature | No Info |
| (q) Decomposition temperature | No Info |
| (r) Viscosity | No Info |

10. Stability and reactivity.

- | | |
|---|---|
| a) Reactivity: | Stable |
| (b) Chemical stability: | If stored and used properly, high stability |
| (c) Possibility of hazardous reactions: | None Known |
| (d) Conditions to avoid: | Extreme temperatures, high or low |
| (e) Incompatible materials: | None Known |
| (f) Hazardous decomposition products: | May produce CO2 under combustion |

11. Toxicological information.

- (1) Inhalation Irritation: N/A
- (2) Acute Oral Toxicity: None shown.
- (3) Primary Skin Irritation: None shown.
- (4) Acute Eye Irritation: Immediate, clearing in 1-24 hours.

12. Ecological information.

It is generally considered compatible in the environment. If any used product has become contaminated or mixed with other fertilizers, it should be evaluated and disposed of accordingly.

- (a) Ecotoxicity (aquatic and terrestrial): No information available.
- (b) Persistence: No information available.
- (c) Bioaccumulative potential: No information available.
- (d) Mobility in soil: No information available.
- (e) Other adverse effects: No information available.

13. Disposal considerations.

- (a) The active components are naturally occurring in soils, rinse water may be disposed of on soil and farm surfaces.
- (b) Thoroughly rinse all empty containers. Do not reuse containers. Do not contaminate food by storage or disposal.

14. Transport information.

- (a) No special or specific requirements

15. Regulatory information.

Safety, health and environmental regulations specific for this product: NONE

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.