

# SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

### Section 1: Chemical Product and Company Identification

PRODUCT NAME: FORMULA: PRODUCT USE:

### **PhycoTerra®** Organic

Preparation/Mixture For use as a soil amendment

MANUFACTURER: Heliae Development, LLC 578 E Germann Rd. Gilbert, AZ 85297

NON-EMERGENCY: Information: 480-424-2875 Fax: 480-424-2882 Email: safety@heliae.com

### EMERGENCY TELEPHONE:

| Verisk 3E access code 335152 |                 |  |  |  |
|------------------------------|-----------------|--|--|--|
| North & South America:       | +1 760 476 3962 |  |  |  |
| United States toll free:     | +1 866 519 4752 |  |  |  |
| Australia:                   | +61 280363166   |  |  |  |
| Great Britain:               | +44 20 35147487 |  |  |  |
| New Zealand:                 | +64 800 451719  |  |  |  |
| Europe:                      | +1 760 476 3961 |  |  |  |
| Africa/Middle East           | +1 760 476 3959 |  |  |  |
| Asia:                        | +1 760 476 3960 |  |  |  |

### Section 2: Hazards Identification

| GHS Hazard Class          | Not Applicable. This product does not meet the physical, health, or environmental classification criteria of GHS (Globally Harmonized System). |
|---------------------------|--|
|                           | Hazards not otherwise classified (HNOC) - None   |
| HAZARD CLASSIFICATION:    | Not classified as hazardous based on IATA, IMDG, and DOT.  |
| FIRE AND EXPLOSION:       | Not considered flammable or combustible.   |
| POTENTIAL HEALTH EFFECTS: | <0 % of mixture consists of ingredients of unknown acute toxicity  |
| APPEARANCE:               | Green liquid   |
|                           |  |

Estimated NFPA Rating:

| Component           | Health | Flammability | Reactivity | Special |
|---------------------|--------|--------------|------------|---------|
|                     | (Blue) | (Red)        | (Yellow)   | (White) |
| PhycoTerra® Organic | 0      | 0            | 0          |         |

### Section 3: Composition, Information on Ingredients

| PRODUCT<br>COMPOSITION | APPROX<br>% | CAS<br>NO. | EC<br>NUMBER | CANADA<br>DSL |
|------------------------|-------------|------------|--------------|---------------|
| Water                  | Balance     | 7732-18-5  | 231-791-2    | Y             |
| Organic Matter         | 9           |            |              | Ν             |
| Citric acid            | 0.5 - 1.5   | 77-92-9    | 201-069-1    | Y             |
| Acetic acid            | 1.0         | 64-19-7    | 200-580-7    | Y             |



## Section 4: First Aid Measures

### **Description of First Aid Measures**

| Inhalation   | If inhaled, supply fresh air or oxygen. Adverse effects are not expected |
|--------------|--|
|              | from this product.   |
| Skin Contact | Wash skin with plenty of soap and water. Remove contaminated clothing.   |
| Eye Contact  | Immediately flush eyes with plenty of water for at least 15 minutes. Get |
|              | immediate medical attention.   |
| Ingestion    | If swallowed do NOT induce vomiting. Rinse mouth with water. Never       |
|              | give anything to an unconscious person. Get immediate medical attention. |

#### Most important symptoms and effects, both acute and delayed

| Symptoms/Injuries after Inhalation   | May cause respiratory irritation.   |
|--------------------------------------|---|
| Symptoms/Injuries after Skin Contact | May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.                                       |
| Symptoms/Injuries after Eye Contact  | May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. |
| Symptoms/Injuries after Ingestion    | May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.   |

#### Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

### Section 5: Fire-fighting Measures

| Suitable extinguishing media                          | Use foam, dry chemical, carbon dioxide, or a suitable extinguishing media for the surrounding fire.      |
|---|--|
| Special hazards arising from the substance or mixture | No data available.   |
| Protective actions fire-fighters                      | Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary. |
| Further information                                   | Use water spray to cool unopened containers.   |

### Section 6: Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures** Wear proper personal protective equipment.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

### Methods and materials for containment and cleaning up

In case of small spills, absorb with inert materials and dispose of according to local regulations In case of large spills, dike the spill, if possible. Absorb the liquid and dispose of according to local regulations.

**Reference to other Sections** For personal protection reference section 8. For disposal reference section 13.

### Section 7: Handling and Storage

### Precautions for safe handling

Wear proper protective equipment when handling this material.

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Avoid contact with skin, eyes, or clothing. Wash hands and face after handling this material. Appropriate container should be used for disposal. For precautions see section 2.

#### Conditions for safe storage, including any incompatibilities

Store upright in a cool, dry place. Keep container closed when not in use. Do not store with strong oxidizers. Utilize chemical segregation. Follow all applicable local regulations for handling and storage.

#### Specific uses

This product is intended for use as a soil amendment.

### Section 8: Exposure Controls/Personal Protection

#### **Control Parameters**

Contains no substances with occupational exposure limit values.

#### **Exposure controls**

| VENTILATION:                  | Always provide good general, mechanical room ventilation where this chemical/material is used. |
|-------------------------------|--|
| SPECIAL VENTILATION CONTROLS: | None   |
| RESPIRATORY PROTECTION:       | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the                         |
|                               | CEN European Standards (EU). Use a NIOSH/MSHA or European                                      |
|                               | Standard (EN) approved respirator if exposure limits are exceeded or if                        |
|                               | irritation or other symptoms are experienced.  |
| PROTECTIVE GLOVES:            | Neoprene, butyl, or nitrile rubber gloves are recommended.                                     |
| EYE PROTECTION:               | Recommend eye protection using safety glasses or goggles.                                      |
| SKIN PROTECTION:              | Suitable protective clothing to prevent skin contact   |
| WORK/HYGIENE PRACTICES:       | Avoid contact with eyes. Wash hands after handling.  |
| OTHER EQUIPMENT:              | Make safety shower, eyewash stations, and hand washing equipment available in the work area.   |
|                               |  |

### Section 9: Physical and Chemical Properties

|  | PRODUCT CRITERIA  |
|--|-------------------|
| APPEARANCE - COLOR:                          | Green             |
| PHYSICAL STATE:                              | Liquid            |
| ODOR:  | Marine            |
| ODOR THRESHOLD                               | No data available |
| PH   | 2.8 - 3.5         |
| MELTING POINT/FREEZING POINT:                | 0 °C (32 °F)      |
| INITIAL BOILING POINT AND BOILING RANGE:     | 100°C (212°F)     |
| FLASH POINT:                                 | No data available |
| EVAPORATION RATE:                            | No data available |
| FLAMMABILITY (Solid, gas)                    | No data available |
| UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS | Not Measured      |
| VAPOR PRESSURE                               | No data available |
| VAPOR DENSITY (AIR = 1)                      | No data available |
| RELATIVE DENSITY (@25 °C):                   | No data available |
| SOLUBILITY(IES)                              | No data available |
| OXIDIZING PROPERTIES                         | No data available |
| PARTITION COEFFICIENT: n-octanol/water       | No data available |
| AUTO IGNITION TEMPERATURE                    | No data available |
| DECOMPOSITION TEMPERATURE                    | No data available |



No data available

## Section 10: Stability and Reactivity

Reactivity: Chemical Stability:

Possibility of Hazardous Reactions: Conditions to Avoid: Incompatibility (Materials to Avoid): Hazardous Decomposition Products: Not reactive Stable under recommended conditions. However, high temperature and UV light decomposes the material. Will not occur under normal temperatures and pressures. No data available. Oxidizing agents. No data available.

## Section 11: Toxicological Information

#### There is no toxicological information available for the product.

| GHS Required Criteria             | Toxicity Criteria                    | Toxicity Information | Comments | Chemical Constituent |
|-----------------------------------|--------------------------------------|----------------------|----------|----------------------|
| A suctor Transision               | LD50 (Oral/Rat):                     | 3000 mg/kg           |          | Citric acid          |
| Acute Toxicity                    | LD50 (Oral/Rat):                     | 3.53 g/kg            |          | Acetic acid          |
| Skin Corrosion/Irritation         | LD50 (Dermal/Rabbit):                | 1060 mg/kg           |          | Acetic acid          |
| Skin Corrosion/Irritation         | May cause mild skin irritation at pH | [<2                  |          | Citric acid          |
| Serious Eye Damage /              | Irritating to eyes at pH < 2         |                      |          | Citric acid          |
| Eye Irritation                    | initiating to eyes at pir +2         |                      |          | Acetic acid          |
| Respiratory or Skin Sensitization | Data not available                   |                      |          |                      |
| Germ Cell Mutagenicity            | Data not available                   |                      |          |                      |
| Carcinogenicity                   | NTP                                  | Not listed           |          |                      |
|                                   | IARC                                 | Not listed           |          |                      |
|                                   | OSHA                                 | Not listed           |          |                      |
| Reproductive Toxicity             |                                      | Data not available   |          |                      |
| STOT Single Exposure              |                                      | Data not available   |          |                      |
| STOT – Repeated Exposure          |                                      | Data not available   |          |                      |
| Aspiration Hazard                 |                                      | Data not available   |          |                      |

STOT = Specific Target Organ Toxicity

## Section 12: Ecological Information

|                                |  | Chemical Constituent |
|--------------------------------|--|----------------------|
|                                | LC50: 160 mg/L, Carcinus maenas (Green or European shore crab); 48 hr        | Citric acid          |
| Toxicity:                      | LC50: 440 mg/L, Leuciscus idus melanotus; 48hr.                              | Citric acid          |
| Toxicity:                      | EC50: 156 mg/L, Chlorococcales (Green Algae Order); freshwater static; 24 hr | Acetic acid          |
|                                | LC50: 116mg/L, Crangon septemspinosa (Bay Shrimp, Sand Shrimp)               | Acetic acid          |
| Persistence and degradability: | Readily biodegradable  |                      |
| Bioaccumulative potential      | No information is available.   |                      |
| Mobility in soil:              | No information is available.   |                      |
| PBT and vPvB assessment:       | PBT/vPvB assessment not available as chemical assessment                     |                      |
| FB1 and VFVB assessment.       | not required/not conducted   |                      |
| Other adverse effects:         | No information is available.   |                      |

## Section 13: Disposal Considerations

Waste from residues/unused products: Follow the waste disposal requirements of your country, state, or local authorities.

**Contaminated packaging:** Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate: Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

## Section 14: Transport Information



| <b>DOT TRANSPORT:</b>         |                                    | Not Regulated |
|-------------------------------|------------------------------------|---------------|
| <u>ADR = International Ca</u> | arriage of Dangerous Goods by Road | Not Regulated |
| SEA TRANSPORT:                | IMDG                               | Not Regulated |
| AIR TRANSPORT:                | IATA/ICAO                          | Not Regulated |

### Section 15: Regulatory Information

TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and orders of TSCA. All components are either listed on a federal chemical inventory or are considered exempt.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

#### **CALIFORNIA PROPOSITION 65:**

This regulation requires a warning for California Proposition 65 chemical(s) under the statute. The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

| Massachusetts's hazardous substance(s):   | Not listed |
|---|------------|
| Pennsylvania hazardous substance code(s): | Not listed |
| New Jersey                                | Not listed |

#### CANADA:

WHMIS-2015: This SDS is in compliance with WHMIS 2015 (HPR / new HPA).

#### EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

### Section 16: Other Information

| Initial issue date:  | April 27, 2016                           |
|----------------------|--|
| Final revision date: | Sept 13, 2019                            |
| Revision Number:     | 5  |
| Revision explanation | New formula with acetic acid             |
| Information Sources: | RTECS, ECHA, REACH, OSHA 29CFR 1910.1200 |

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