

### Section 1: Identification Product Name

**Product Name:** Holganix Bio 800+ Breakdown 2-0-0.

**Other Means of Identification:** Holganix Bio 800+ Breakdown 2-0-0 is a concentrated, compost tea.

**Intended Use:** Holganix Bio 800+ Breakdown 2-0-0 is intended to be used as an agent to breakdown straw on soil in no till agricultural.

**Manufacturer:** Holganix LLC

**Address:** 3033 Market Street Aston, PA 19014-3436 USA

**Telephone:** (Toll Free) 866.563.2784

**Website:** www.holganix.com Emergency

Telephone Contacts: Holganix LLC (9:00 am to 5:00 pm EST/EDT, Mon. through Fri.) – 866.563.2784.

**Poison Control Centers: Emergency Phone Number Medical/Poison Control:** In U.S. Call 1-800- 222-1222.

### Section 2: Hazard Identification

- **Physical Hazard(s):** Not Classified.
- **Health Hazard(s):** Not Classified.
- **OSHA Defined Hazards:** Not Classified.
- **Product Label Warnings:**
  - **Hazard Symbol:** Not required.
  - **Signal Word:** Not required.
  - **Hazard Statement:** Not required.
  - **Precautionary Statements:** No precautionary statements are required.
- **Eye Exposure:** Immediately rinse with water.
- **Skin Exposure:** Rinse with water, then wash with soap and water.
  - **Avoid Exposure:** Wear goggles with side shields, wear rubber or neoprene gloves and wear clothing to prevent repeated or prolonged skin exposure.
- **Hazard(s) Not Otherwise Classified (HNOC):** None known.

### Section 3: Composition/Information on Ingredients

Ingredients in Holganix Bio 800+ Breakdown 2-0-0:

- Molasses..... 14.68% contains sucrose CAS Number 57-50-1.
- High Fructose Corn Syrup..... 1.20% CAS Number 8024-45-4.
- Amino Acids..... 2.08% 18 essential “L” amino acid, each with an individual CAS ..Number 17407-39-5, 7200-25-1, 3130-87-8, 617-45-8, 56-40-6, 3374-22-9, 585-221-7, 4998-57-6, 3343-46-2, 328-39-2, 70-84-7, 59-51-8, 160751-44- 0, 609-36-9, 3614-08-2, 302-84-1, 134357- H96-3, 54-12-6, 55520-40-6, 516-06-3.
- Humic Acid..... 0.20% CAS Number 1415-98-6.
- Fulvic Acid..... 0.17% CAS Number 479-66-3.
- Kelp (Ascophyllum nodosum).... 0.04% CAS Number 92128-82-0.

### 4: First-Aid Measures

- **First-aid measures by route of exposure:**
  - **If Inhaled:** Relocate to fresh air. If the nasal cavity is irritated, flush with water. Seek medical attention if irritation occurs and persists.
  - **Skin Contact:** First rinse the exposed area then wash thoroughly with soap and water. Seek medical attention if symptoms develop or irritation persists. Launder contaminated clothing before wearing it again.
  - **Eye Contact:** Immediately flush with water for a period of 15 minutes. If eye irritation develops and persists, get medical attention.
  - **If Ingested:** Rinse mouth with water and drink 8 to 16 fluid ounces of water. Do not induce vomiting. Get medical attention if irritation occurs and persists. If ingested in large amounts, **call the USA Poison Control Center at 1-800-222-1222.**
  - **If vomiting occurs:** lower the head to keep vomit from being swallowed.
- **Most important symptoms and effects (acute or delayed):** The most important symptoms requiring first aid attention will be acute.
- **Immediate medical attention and special treatment, if necessary:** If symptoms persist, seek medical attention from a physician.

### Section 5: Fire-Fighting Measures

- **Suitable extinguishing media:** Holganix Bio 800+ Breakdown 2-0-0 is a water suspension of microorganisms. It is non-flammable. If the product is involved in a fire, use extinguishing media appropriate to other fire involved materials. If possible, move Holganix Bio 800+ Breakdown 2-0-0 containers to a safe location.
- **Unsuitable extinguishing media:** There is no unsuitable extinguishing media. ● **Specific hazards arising from the hazardous product (e.g., hazardous combustion products):** Holganix Bio 800+ Breakdown 2-0-0 is not a hazardous product. There are no specific hazards arising from Holganix Bio 800+ Breakdown 2-0-0 being involved in a fire.

## Section 5: Fire-Fighting Measures (continued)

● **Special protective equipment and precautions for fire-fighters:** Fire-fighters should use self-contained breathing apparatus and full protective clothing should be worn when combating chemical and/or biological fires. If possible, move Holganix Bio 800+ Breakdown 2-0-0 containers to a safe location.

**6: Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures:** Wear protective clothing and use protective equipment as directed in Section 8 of this SDS.
- **Methods and materials for containment and cleaning up:**
  - If this is possible without risk, stop the flow of material. ○ If safe to do so, prevent further leakage or spillage.
  - Dike the spilled material where possible.
  - Do not allow spillage to reach drains, sewers or waterways.
  - When leakage is controlled, use vermiculite, dry sand or diatomaceous earth to absorb the spill. Collect residue, place it in a container(s) and dispose as biological waste.
  - Following product recovery:
    - Flush the area with water. ▪ Retain all contaminated water for removal and treatment.
    - For waste disposal, see Section 13 of this SDS.
    - Uncontaminated spilled material may be recycled for its intended use.
  - If you cannot contain the spill and the contents of the spill have reached or are about to reach drains, sewers or waterways, contact local authorities immediately.

**Section 7: Handling and Storage**

- **Precautions for safe handling:**
  - Avoid splashing product in eyes and prolonged or repeated contact with skin.
  - Eyewash facilities and emergency showers must be available when handling this product.
  - Wear appropriate personal, protective equipment (See Section 8 of this SDS) while handling and spraying Holganix Bio 800+ Breakdown 2-0-0.
  - Avoid breathing mist or vapor. ○ Use only in well-ventilated areas.
  - Wash hands thoroughly after handling Holganix Bio 800+ Breakdown 2-0-0.
  - Holganix Bio 800+ Breakdown 2-0-0 contains living microorganisms.
    - It is possible that cells of bacteria or filaments of fungi mycelium may aggregate in the container on the surface of the product.
    - If you notice solids floating on the surface of Holganix Bio 800+ Breakdown 2-0-0, sieve the product to remove this material prior to or as you are mixing the product with water in the spray tank.
    - Sieving the product will prevent clogging of spray lines or nozzles while applying the diluted product.

Section 7: Handling and Storage (continued).

- o Diluted spray solution must be applied within 48 hours of diluting and mixing.
  - If not applied within 48 hours of diluting and mixing, the microorganisms may die rendering the mixture less than effective.
  - The effectiveness of microorganisms in a diluted spray solution can be extended beyond 48 hours to 30 days by aerating the spray solution in between applications of the product.
- **Conditions for safe storage (including incompatible materials):**
  - o Store product in refrigerated conditions between 33° F and 44° F (0.56° C and 6.67° C).
  - o Return partially used containers to refrigeration following loading of the spray tank.

**Section 8: Exposure Controls/Personal Protection**

- **Control parameters, including occupational exposure guidelines or biological exposure limits and the source of those values:**
  - o No occupational exposure limits are noted.
  - o No special precautions required while handling or spraying Holganix Bio 800+ Breakdown 2-0-0.
  - o No biological limit values are noted.
- **Appropriate Engineering Controls:**
  - o Adequate ventilation should be provided to avoid inhalation.
  - o Eyewash stations should be installed in the workplace.
- **Individual protection measures (e.g. personal protective equipment):**
  - o **Eye and Face Protection:** While working with open containers, wear safety glasses with side shields or goggles and a face shield.
  - o **Skin Protection:** While working with open containers, wear rubber or neoprene gloves. Wear clothing that will provide protection from repeated or prolonged contact with chemical splashes or spills.
- **Respiratory Protection:** Not Required.
- **General Hygiene Considerations:** Handle in accordance with good industrial hygiene and safety practice.

**Section 9: Physical and Chemical Properties**

- **Appearance:**
  - Physical State: Liquid.
  - Form: Suspension.
  - Color: Brown.
- **Odor:** Vinegar odor.
- **Odor/Threshold:** Not available.
- **pH:** 4.0 to 4.5.
- **Melting Point/Freezing Point:** <32°F (0.0°C).
- **Initial Boiling Point/Boiling Range:** 212°F (100°C)/Not Available.
- **Flash Point: Non-combustible:**
- **Evaporation Rate:** Not available
- **Flammability (solid, gas):** Non-flammable.
- **Lower Flammability Explosive Limit:** Non-flammable Nonexplosive.
- **Upper Flammability Explosive Limit:** Non-flammable Nonexplosive.
- **Vapor Pressure:** Not available.
- **Vapor Density:** Not available.
- **Relative Density:** Not available.
- **Solubility(s):**
  - **Solubility, Water:** Soluble.
- **Partition Coefficient (n-octanol/H<sub>2</sub>O):** Not available.
- **Auto-Ignition Temperature:** Non-flammable.
- **Decomposition Temperature:** Not available.
- **Viscosity:** Not available
- **Other Information:**
- **Bulk Density:** 9.125 lb/gal.
  - **VOC:** Not available.
  - **Specific Gravity:** Not available.

### Section 10: Stability and Reactivity

- **Reactivity:** This product is stable and non-reactive under normal conditions of use, storage and transport.
- **Chemical stability:** This product ferments if left in a concentrated form above 44° F (6.7° C). Packages are vented to permit off gassing.
- **Possibility of hazardous reactions:**  
There are no dangerous reactions known under normal conditions of use.
- **Conditions to avoid:** Avoid storage above 44° F (6.7° C).
- **Incompatible materials:** Visit the Holganix website ([www.holganix.com](http://www.holganix.com)) to review a list of compatible/incompatible products.

### Section 11: Toxicological Information

- **Information on Likely Routes of Exposure:**
  - **Inhalation:** Airborne particles and/or mist may be irritating to the respiratory system.
  - **Skin Contact:** Skin contact is known to cause mild, transient skin irritation.
  - **Eye Contact:** No known eye effects.
  - **Ingestion:** No known effects of ingestion.
- **Symptoms Related to the Physical, Chemical and Toxicological Characteristics:** Mild, transient skin irritation may result from skin contact.
- **Acute Toxicity:** ○ **Dermal LD50:** Not classified. ○ **Oral LD50:** Not classified.
- **Skin Corrosion/Irritation:** May cause skin irritation.
- **Serious Eye Damage/Eye Irritation:** No known eye damage or irritation.
- **Respiratory or Skin Sensitization:**
  - **Respiratory Sensitization:** Not classified.
  - **Skin Sensitization:** Not classified.
- **Germ Cell Mutagenicity:** Not classified.
- **Carcinogenicity:** Not classified as a carcinogen by IARC, ACGIH, or OSHA.
  - **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):** Not listed.
- **Reproductive Toxicity:** Not classified.
- **Specific Target Organ Toxicity, Single Exposure:** Not classified.
- **Aspiration Hazard:** Based on available data, the classification criteria are not met.
- **Chronic Effects:** Prolonged inhalation may be harmful. No evidence of potential chronic effects.
- **Further Information:** No other specific acute or chronic health impacts were noted.

### Section 12: Ecological Information

- **Ecotoxicity:** Holganix Bio 800+ Breakdown 2-0-0 is not classified as environmentally hazardous.
- **Persistence and degradability:** Components of Holganix Bio 800+ Breakdown 2-0-0 are living microorganisms and organic chemistry known to be present in soils.
  - **Microorganisms:** The microorganisms in the product will not degrade, but will increase or decrease in the soil microbiome according to environmental conditions and competition from native microorganisms.

- **Organic chemicals:** The organic chemicals in the product will degrade and/or be consumed by soil microorganisms.
- **Bio-accumulative potential:** The microorganisms and bio-chemicals found in Holganix Bio 800+ Breakdown 2-0-0 are all naturally occurring and found in soil. There is no bio-accumulative effect.
- **Mobility in soil:**
  - The microorganisms in the product are not soluble. Some will be bound to soil particles or organic chemistry in the soil. Others will wash out of the rhizosphere (soil associated with roots), but are not likely to multiply as their source of food is provided by plant roots in the rhizosphere. Microorganisms that stay in the rhizosphere will multiply and accumulate as long as species' consistent growth requirements are met. Regardless of this, accumulation is not expected to exceed the life of the plant roots as the roots are the source of many of the species' growth requirements.
  - The biochemicals in the product and/or produced by the microorganisms are not likely to accumulate as they are life chemicals produced and consumed by plants, microorganisms and other life forms in the soil.
- **Other adverse effects:** There are no known adverse effects of using Holganix Bio 800+ Breakdown 2-0-0.

### Section 13: Disposal Considerations

- **Disposal Instructions:** Dispose in accordance with local, territory, provincial and Canada laws and regulations at the time of disposal. Do not allow contents of the package to drain into sewers or watersheds.
- **Hazardous Waste Code:** Assignment of a waste code should be discussed amongst the producer, user, and the waste disposal company(s).
- **Waste from Residues/Unused Products:** Empty containers may still contain product or residue. See (Disposal Instructions in this Section 13 of the SDS).

### Other Information

**Issue Date:** May 10, 2022

**Revision Date:** May 10, 2022

**Version:** # 01

**Disclaimer:** The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. Holganix LLC makes no warranties, expressed or implied, including, but not limited to, any implied merchantability or fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether this product is fit for a particular purpose and suitable for the user's method of use or application and assumes the risk of use thereof. The conditions and use of this product are beyond the control of Holganix LLC and Holganix LLC disclaims any liability for loss or damage incurred in connection with the use or misuse of this product. Each user should review the recommended industrial hygiene and safe handling procedures