

# Holganix LLC – Hazard Communication Safety Data Sheet

HGX Pro Bio 800+ Turf

May 17, 2024

## Section 1: Identification

**1.1. Product Name:** HGX Pro Bio 800+ Turf

**1.2. Common Name:** Bio 800+ Turf.

**1.3. Product Type:** A concentrated compost tea for use as a soil amendment on lawns.

**1.4. Company Name:**

Holganix LLC  
1000 N 5 Points Road,  
West Chester, PA 19380 United States  
T 1-866-563-2784  
[www.holganix.com](http://www.holganix.com)

**1.5. Emergency contact:**

- **Holganix LLC (9:00 am to 5:00 pm EST/EDT, Mon. through Fri.)** – 866.563.2784.
- **CHEMTREC, 24hr/day 7days/week**
  - Within USA and Canada (Local): 1-703-527-388
  - Toll Free Number: 1-800-424-9300
- **Poison Emergency:** American Association of Poison Control Centers at 1.800.222.1222.
- **Environmental Spill:** National Response Center at 1.800.424.8802.

## Section 2: Hazard(s) Identification

**2.1. Physical Hazard(s):** Not classified.

**2.2. Health Hazard(s):** Not classified.

**2.3. OSHA Defined Hazards:** Not classified.

**2.4. Product Label Warnings:**

- **Hazard Symbol:** Not required.
- **Signal Word:** Not required.
- **Hazard Statement:** Not required.
- **Precautionary Statements:** No precautionary statements are required.

**2.5. Eye Exposure:** Immediately rinse with water.

**2.6. Skin Exposure:** Rinse with water, then wash with soap and water.

- **Avoid Exposure:** Wear goggles with side shields, where rubber or neoprene gloves and wear clothing to prevent repeated or prolonged skin exposure.

**2.7. Hazard(s) Not Otherwise Classified (HNOC):** None known.

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## Section 3: Composition/Information on Ingredients

HGX Pro Bio 800+ Turf is a patented, concentrated, compost tea. The dominant bacteria family in HGX Pro Bio 800+ Turf is *Lactobacillaceae* (genera *Lactobacillus* and *Pediococcus*). Many of the species in the *Lactobacillus* and *Pediococcus* are GRAS (Generally Recognized as Safe)/by the U. S. FDA (U. S. Food and Drug Administration). These bacteria are used in food (sauerkraut, pickles, olives, cheese, probiotics, etc.) and beverages (beer and wine) for human consumption and fermented feed for livestock (silage).

- **Mixtures in HGX Pro Bio 800+ Turf**

- HGX Pro Bio 800+ Turf is a patented, concentrated, compost tea that contains suspended microorganisms. This mixture of microorganisms includes archaea, bacteria, fungi, protozoa, and nematodes. By qualitative and quantitative analysis, bacteria are the dominant species.
- There are  $5.9 \times 10^7$  cfu per ml bacteria of the family *Lactobacillaceae* in HGX Pro Bio 800+ Turf. These bacteria include *Lactobacillus acidifarinae*, *L. brevis*, *L. cameliae*, *L. fructivorans*, *L. japonicus*, *L. kefiri*, *L. manihiotivorans*, *L. pantheris*, *L. parabrevis*, *L. parabuchneri*, *L. parafarraginis*, *L. parakefiri*, *L. pentosus*, *L. plantarum*, *L. pontis*, *L. rhamnosus*, *L. senmaizukei*, *L. similis*, *L. ultuniensis*, *L. zaeae*, *Pediococcus argentanicus*, *P. cellicola* and *P. clausseii*.
- Many of the species in the genera *Lactobacillus* and *Pediococcus* are GRAS (Generally Recognized as Safe)/by the U. S. FDA (U. S. Food and Drug Administration).
- Other bacteria families that may be present in HGX Pro Bio 800+ Turf include (but are not limited to) *Acetobacteriaceae*, *Bacillaceae*, *Enterococcaceae*, *Flavobacteriaceae*, *Leuconostocaceae*, *Paenibacillaceae* and *Streptococcaceae*.
- Other soil microorganisms in this product may include archaea fungi, yeasts, protozoa, and nematodes.
- Ingredients in in HGX Pro Bio+ 800 Turf:
  - Water.....87.46% CAS # 7732-18-5.
  - Molasses.....12.03% contains yucca extract - CAS # 90147-57-2
  - Amino Acids.....0.20% 18 essential “L” amino acid, each with an individual CAS # - 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, 134357-96-3, 54-12-6, 55520-40-6, 516-06-3.
  - Humic Acid.....0.20% CAS # 1415-98-6.
  - Fulvic Acid.....0.05% CAS # 479-66-3.
  - Kelp.....0.06%.

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## Section 4: First-Aid Measures

### 4.1. Description of First Aid Measures:

- **First Aid Measures After Inhalation:** Evacuate to a well ventilated and non-exposed area.
- **First Aid Measures After Skin Contact:** Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
- **First Aid Measures After Eye Contact:** Immediately flush with water for a period of 15 minutes while holding eyelids open. Obtain medical attention if irritation develops or persists.
- **First Aid Measures After Ingestion:** If swallowed, do not induce vomiting. Seek medical advice immediately and show the container or a copy of the label to the attending medical professional.

## Section 5: Fire-Fighting Measures

**5.1. Fire and Explosion Hazards:** non-combustible, not an explosion hazard.

**5.2. Hazardous Combustion Products:** none.

**5.3. Special Firefighting Procedures:** Self-contained breathing apparatus and full protective clothing should be worn when combating chemical and/or biological fires.

**5.4. Protective Equipment and Firefighting Procedures:** Self-contained breathing apparatus and full protective clothing should be worn when combating chemical and/or biological fires. Use personal protective equipment and follow firefighting procedures appropriate to workplace conditions.

**5.5. Firefighting Equipment and Instructions:** Use standard firefighting equipment. Consider hazards from other fire involved materials. If possible, move nearby containers to a safe location.

## Section 6: Accidental Release Measures

**6.1. Personal Precautions:** Wear protective clothing as directed in Section 8 of this SDS.

**6.2. Environmental Precautions:** Prevent further leakage if safe to do so. Do not contaminate the water.

**6.3. Method of Containment:** Stop the flow of material if this is possible without risk. Dike the spilled material where possible. Prevent further leakage or spillage if safe to do so. Do not allow spillage to reach drains, sewers, or waterways. If you cannot contain the spill and the content of the spill has reached or is about to reach drains, sewers, or waterways, contact local authorities immediately.

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## 6.4. Method of Cleaning Up:

- **Small Spill:** Wear rubber gloves. Absorb spill with paper or cloth. Place the contaminated paper or cloth in an appropriate disposal container. Thoroughly clean the surface to assure that all remaining contaminant is removed.
- **Large Spill:** Contain and/or absorb the spill with inert material (e.g. sand, vermiculite, etc.), then place in a suitable container. Do not flush to sewer or allow the spill to enter waterways. 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 reused.

## Section 7: Handling and Storage

### 7.1. Storage:

- Store product in refrigerated conditions between 33° F and 44° F.
- Return partially used containers to refrigeration following loading of the spray tank.

### 7.2. Handling:

- While handling HGX Pro Bio 800+ Turf, avoid splashing product in eyes and prolonged or repeated contact with skin.
- Eye wash facilities and an emergency shower must be available when handling this product.
- Wear appropriate personal, protective equipment (See Section 8 of this SDS) while handling and spraying HGX Pro Bio 800+ Turf.
- Avoid breathing mist or vapor.
- Use only in well-ventilated areas.
- Do not use it in areas without adequate ventilation.
- Wash thoroughly after handling.
- HGX Pro Bio 800+ Turf contains living microorganisms. It is possible that cells of bacteria or filaments of fungi mycelium may aggregate. If you notice this, sieve the HGX Pro Bio 800+ Turf.
- prior to or as you are mixing the product with water. Sieving the product will prevent clogging of spray lines or nozzles while applying the diluted product.
- A diluted spray solution must be applied within 48 hours of diluting and mixing. If this is not done, 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 product.
- No special precautions are required while handling or spraying HGX Pro Bio 800+ Turf.

## Section 8: Exposure Controls/Personal Protection

**8.1. Occupational Exposure Limits:** No exposure limits are noted.

**8.2. Biological Limit Values:** No biological limit values are noted.

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**8.3. Appropriate Engineering Controls:** Adequate ventilation should be provided to avoid inhalation. Eyewash stations should be installed in the workplace.

## 8.4. Personal Protective Equipment:

- **Eye and Face Personal Protection:** While working with open containers, wear safety glasses with side shields or goggles and a face shield.
- **Skin Protection:** Wear rubber or neoprene gloves while working with open containers. Wear clothing that will protect you from repeated or prolonged contact with chemical splashes or spills.
- **Respiratory Protection:** Not required.

**8.5. General Hygiene Considerations:** Handle in accordance with good industrial hygiene and safety practices.

## Section 9: Physical and Chemical Properties

### 9.1. Information on Basic 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°C).
- **Boiling Point:** 212°F (100°C).
- **Boiling Range:** Not available.
- **Flash Point:** Non-combustible.
- **Evaporation Point:** Not available (similar to water).
- **Evaporation Rate:** Not available
- **Flammability (solid, gas):** Non-flammable.
- **Upper/Lower Flammability or Explosive Limits:**
  - **Flammability Limit – Lower:** Non-flammable.
  - **Flammability Limit – Upper:** Non-flammable.
  - **Explosive Limit – Lower:** Not explosive.
  - **Explosive Limit – Upper:** Not explosive.
- **Vapor Pressure:** Not available.
- **Vapor Density:** Not available.
- **Relative Density:** Not available.
- **Solubility(s):**

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- **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

**10.1. Reactivity:** This product is stable and non-reactive under normal use, storage, and transport conditions.

**10.2. Chemical Stability:** This product ferments if left in concentrated form above 44°F (6.7°C). Packages are vented to permit off gassing.

**10.3. Possibility of Hazardous Reactions:** There are no dangerous reactions known under normal conditions of use.

**10.4 Conditions to Avoid:** Do not store HGX Pro Bio 800+ Turf at temperatures below 33°F (0°C) or above 44°F (6.7°C).

**10.5. Incompatible Materials:** None known.

**10.6. Hazardous Decomposition Products:** None known.

## Section 11: Toxicological Information

### 11.1. Information on the 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.

**11.2. Symptoms Related to Physical, Chemical and Toxicological Characteristics:** Mild, transient skin irritation may result from skin contact.

- **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.

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- **Skin Sensitization:** Not classified.

## 11.3. Acute Toxicity:

- **Dermal LD50:** Not classified.
- **Oral LD50:** Not classified.

## 11.4. Description of Delayed, Immediate or Chronic Effects from Short- and Long-Term Exposure:

### Symptoms Related to the Physical, Chemical and Toxicological Characteristics:

- **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.
- **Specific Target Organ Toxicity (Repeated 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

**12.1. Eco-toxicity:** HGX Pro Bio 800+ Turf is not classified as environmentally hazardous.

**12.2. Persistence and Degradability:** Components of HGX Pro Bio 800+ Turf 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.

**12.3. Bio-accumulative Potential:** No data is available.

**12.4. Partition Coefficient – n-octanol/water (logKow):** No data is available.

### 12.5. Mobility in Soil:

- Chemical components of this product are water soluble and will disperse in soil water.
- Some microorganisms in this product are mobile and will move in soil through soil water.

## Section 13: Disposal Considerations

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**13.1. Disposal Instructions:** Dispose in accordance with local, state, and federal laws and regulations at the time of disposal. Do not allow contents of the package to drain into sewers or water sheds.

**13.2. Hazardous Waste Code:** Assignment of a waste code should be discussed amongst the producer, user and the waste disposal company(s).

**13.3 Waste from Residues/Unused Products:** Empty containers may still contain product or residue. See (Disposal Instructions in this Section 13 of the SDS).

## Section 14: Transport Information

**14.1. In Accordance with Department of Transportation (DOT):** Not regulated for transport.

**14.2. In Accordance with International Maritime Dangerous Goods Code (IMDG):** Not regulated for transport.

**14.1. In Accordance with International Air Transport Association (IATA):** Not regulated for transport.

## Section 15: Regulatory Information

**15.1. US Federal Regulations:**

- **CAC (Clean Air Act) Section 112 Hazardous Air Pollutants (HAPs) List:** Not regulated.
- **CAC Section 112(r) Accidental Release Prevention (40 CFR 68.130):** Not regulated.
- **CERCLA Hazardous Substance List (40 CFR 302.4):** Not listed.
- **OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous chemical.
- **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):** Not listed.
- **Super Fund Amendments and Reauthorization Act (SARA) of 1986:**
  - **Hazard Categories:**
  - **Immediate Hazard:** Yes.
  - **Delayed Hazard:** No.
  - **Fire Hazard:** No.
- **SARA 302 Extremely Hazardous Substance:** Not listed.
- **SARA 304 Emergency Release Notification:** Not regulated.
- **SARA 311/312 Hazardous Chemical:** Yes.
- **SARA 313 TRI Reporting:** Not listed.
  - **Pressure Hazard:** No.
  - **Reactivity Hazard:** No.
- **Safe Drinking Water Act (SDWA):** Not regulated.
- **TSCA Section 12(b), Export Notification, (40 CFR 707, Subpt. D):** Not regulated.



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## Section 16: Other Information

**Issue Date:** October 5, 2023

**Revision Date:** May 17, 2024

**Version #:** 02

### List of Abbreviations:

|                |  |
|----------------|--|
| <b>ACGIH:</b>  | American Conference of Government Industrial Hygienists.             |
| <b>C:</b>      | Celsius.   |
| <b>CAC:</b>    | Clean Air Act.   |
| <b>CAS:</b>    | Chemical Abstracts Service.  |
| <b>CERCLA:</b> | Comprehensive Environmental Response Compensation and Liability Act. |
| <b>CFR:</b>    | Code of Federal Regulations.   |
| <b>cfu:</b>    | Colony forming units.  |
| <b>DOT:</b>    | Department of Transportation.  |
| <b>GRAS:</b>   | Generally Recognized As Safe.  |
| <b>HNOC:</b>   | Hazard Not Otherwise Classified.                                     |
| <b>F:</b>      | Fahrenheit   |
| <b>FDA:</b>    | Food and Drug Administration.  |
| <b>IARC:</b>   | International Agency for Research on Cancer.                         |
| <b>LD50:</b>   | Lethal Dose 50%.   |
| <b>OSHA:</b>   | Occupational Safety and Health Administration.                       |
| <b>SARA:</b>   | Super Fund Amendments and Reauthorization Act.                       |
| <b>SDWA:</b>   | Safe Drinking Water Act.   |
| <b>SDS:</b>    | Safety Data Sheet.   |
| <b>TSCA:</b>   | Toxic Substances Control Act.  |
| <b>VOC:</b>    | Volatile Organic Compound.   |

**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. The 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.