



**DATA SHEET #10**  
**FOR "NATURALIZED" TURF**  
**DIEHARD™ Turf**



***"A Complete NATURAL Approach To Turf Establishment"***

DIEHARD™ Turf is formulated to be used as a soil amendment treatment for establishing turf root systems with live beneficial mycorrhizal fungi. A mycorrhizal root system is one that will uptake more water and nutrients than a non-mycorrhizal system. DIEHARD™ Turf contains highly selected strains of low host specificity endomycorrhizae fungi that will quickly colonize the roots to provide the best possible conditions for the roots to become associated with mycorrhiza. The mycorrhizal inoculant is combined with humic acids, beneficial bacteria, soluble sea kelp, and yucca plant extracts, to promote rapid root development. Horta-Sorb® water management gel is added to absorb and slow release all of the soluble components of the formula and to reduce water stress and watering frequency and provide improved moisture conditions for quick establishment. With 90%+ of the roots of sod gone the Horta-Sorb® can make a significant difference. Product is packaged in 3 lb. Bags (treats a 400 sq. ft. pallet) and 25 lb. bags.

**Product Benefits**

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|--|---|
| <p><b>IMPROVES</b><br/> <b>Survival</b><br/> <b>Rooting</b><br/> <b>Water Absorption</b><br/> <b>Nutrient Availability</b></p> | <p><b>REDUCES</b><br/> <b>Fertilizer Use</b><br/> <b>Need Of Pesticides</b><br/> <b>Heat Stress Damage</b><br/> <b>Browning</b></p> |
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**Directions For Use**

Broadcast and spread at the rate of 3/4 pounds per 100 square feet. Lay sod and water. For seeding and sprigging work into the top 2 inches of ground and plant as usual.

**Compatibility**

**Species:** All grasses.  
**Fungicides:** Non-systemic fungicides normally have no effect. Foliar applied fungicides normally have no effect. Systemic fungicides may be applied 2 weeks before or after use of product. Fungicide use according to label instructions do not extinguish mycorrhizae, they only inhibit development for a short period of time.

**Non Plant Food Ingredients**

Endomycorrhizal	7 Propagules per cubic centimeter: <i>Glomus mosseae</i> (1.4), <i>Glomus intraradices</i> (1.4), <i>Glomus fasciculatum</i> (1.4), <i>Glomus dussii</i> (.70), <i>Glomus clarum</i> (.70), <i>Glomus deserticola</i> (.70), <i>Glomus microaggregatum</i> (.70).
Horta-Sorb® MD Water Gel	67% acrylamide copolymer made for agriculture.
Humic Acids	1% Derived from <i>Leonardite</i>
Soluble Yucca Extract	1% <i>Yucca schidigera</i>
Soluble Sea Kelp Extract	1% <i>Ascophyllum nodosum</i>
<i>Trichoderma</i>	600 Million colony forming per lb. <i>Genus Trichoderma</i> (6 species), <i>Gliocladium virens</i> (2 strains), <i>Trichoderma harzianum</i> (2 strains) <i>Trichoderma Viride</i> (2 strains)
Phosphate Solubilizing, Nitrogen Fixing and Growth Promoting Bacteria.	400 Million per lb. to include <i>Genus Bacillus</i> (32 species.), <i>Genus Pseudomonas</i> (2 species.), <i>Genus Streptomyces</i> (2 species.).
Root Promoting Vitamin	Biotin, B, B2, B3, B6, B7, B12, C and K.
Amino Acids (Protein)	Animal and plant proteins
Fulvic Acid	Plant-derived mineral

**Storage & Handling**

Store in a cool, dry place. Avoid high temperatures and direct sunlight. Product shelf life is up to 18

**Health & Safety**

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|------------|--|
| Inhalation | If dusty conditions exist wear a dust mask.                                |
| Ingestion  | Drink large amounts of water, induce vomiting, and seek medical attention. |
| Eyes       | Flush with large amounts of water.   |
| Safety     | Product becomes very slippery when wet.                                    |



FOR "NATURALIZED" TURF

# DIEHARD™ Turf



*"Stimulates root growth naturally"*

## DIEHARD™ Inoculants

### DIEHARD™ Transplant

This is a complete transplant preparation to inoculate landscape trees and shrubs with live beneficial mycorrhizal fungi, "energize" the soil, and provide natural nutrients to trees and shrubs when planting. Contains live spores of endo and ectomycorrhizae combined with humic acids, nitrogen fixing, phosphate solubilizing and growth promoting beneficial bacteria, sea kelp, vitamins, natural wetting agent and stimulants from yucca plant extracts, humic acid, and Horta-Sorb® MD.

### DIEHARD™ Palm

Endomycorrhizae, stimulants, beneficial bacteria, plus all the "goodies" for palms. Formulated by some of the top palm experts in the country.

### DIEHARD™ Flower Bed

Endomycorrhizae, stimulants, beneficial bacteria, plus a light portion of Horta-Sorb® MD to slow release the soluble components of the formulation.

### DIEHARD™ Root Dips

Endo and ectomycorrhizae, stimulants, beneficial bacteria, soluble sea kelp, yucca plant extracts, *Trichoderma*, and Horta-Sorb® SM water management gel to protect the roots, slow release all soluble components of the formulation, and boost survival. Available with endo and ecto or ectomycorrhizae alone.

### DIEHARD™ Root Reviver

Endo and ectomycorrhizae, stimulants, beneficial bacteria, plus a light portion of Horta-Sorb® MD to slow release the soluble components of the formulation. For use as a vertimulch application for trees and shrubs in decline and as a soil amendment for plantings, turf, and propagation mixes.

### DIEHARD™ Injectables

Endo and Ectomycorrhizae, stimulants, beneficial bacteria, soluble sea kelp, yucca plant extracts, *Trichoderma*, and a slight amount of Horta-Sorb® SM gel to slow release all soluble components of the formulation. Available with endo and ecto or ectomycorrhizae alone.

## DIEHARD™ Drenches

A dry, water soluble endo or ecto mycorrhizal inoculants with root growth stimulants containing humic acid extracts, soluble sea kelp, yucca plant extracts, amino acids and nitrogen fixing, phosphate solubilizing and growth promoting bacteria to "energize" the microbial activity in the ground and promote cell division and lateral bud development as well as delay the aging process of plant tissue. Available with endo and ecto or ectomycorrhizae alone.

## DIEHARD™ BioRush™

A dry, water soluble root growth stimulant containing humic acid extracts, soluble sea kelp, yucca plant extracts, amino acids and nitrogen fixing, phosphate solubilizing and growth promoting bacteria to "energize" the microbial activity in the ground and promote cell division and lateral bud development as well as delay the aging process of plant tissue.

## DIEHARD™ BioRush™ Fe

A dry water soluble plant and root growth stimulant with chelated iron, beneficial bacteria packaged in 1 lb. pre-measured pacs, or bulk. Used to promote root growth, enhance vigor, and to reduce stress in trees, shrubs and ornamental plants and turf.

**Limited Warranty:** All information contained herein is offered in good faith. There are no warranties of merchantability of fitness for a particular purpose which extend beyond the information contained herein. Our liability is limited to replacement of any product which does not meet these specifications.

**Distributed by:**

