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Specifications

DIEHARD™ ECTO ROOT DIP

Product Description

All bare root plant species that associate with ectomycorrhizae shall be treated with live beneficial mycorrhizal fungi to inoculate the roots of bare root plants before planting. Product shall contain highly selected strains of low host specificity ectomycorrhizae fungi that will quickly colonize the roots of bare root plants to provide the best possible conditions for the roots to become as effective during and after planting. The mycorrhizal inoculants are combined with humic acids, beneficial bacteria, soluble sea kelp, and yucca plant extracts to promote rapid root development. The mycorrhizal inoculant is managed with Horta-Sorb® SM that also protects the roots from drying out. The results are better survival and growth rates and less watering for all transplants.

Product Specification

Ectomycorrhizal Fungi	2,202,643 spores per gram centimeter to include: <i>Pisolithus tinctorius</i> (1,894,273) and <i>Rhizopogon</i> (308,370).
Humic Acid	3.5% derived from <i>Leonardite</i>
<i>Thichoderma</i>	31,982 CFU's per gram Genus <i>Trichoderma</i> : <i>Trichoderma hamatum</i> , <i>Trichoderma harzianum</i> , <i>Trichoderma viride</i> , <i>Trichoderma reesei</i> .
Soluble Yucca Extract	2% <i>Yucca schidigera</i>
Soluble Sea Kelp Extract	2.2% <i>Ascophylum nodosum</i>
Bacillus, Pseudomonas & Streptomyces Species	25,513,304 CFU's per gram Genus <i>Bacillus</i> : <i>B. megaterium</i> , <i>B. subtilis</i> , <i>B. amyloliquefaciens</i> , <i>B. azotoformans</i> , <i>B. licheniformis</i> , <i>B. pumilus</i> , <i>B. Firmus</i> , <i>B. coagulans</i> , <i>Geobacillus stearothermophilus</i> , and <i>Paenibacillus polymyxa</i> , <i>Paenibacillus Durum</i> . Genus <i>Pseudomonas</i> : <i>P. putida</i> , <i>P. fluorescence</i> , <i>P. Aureofaceans</i> . Genus <i>Streptomyces</i> : <i>S. lydicus</i> , <i>S. griseus</i> , <i>S. coelicolor</i> .
Horta-Sorb® SM, Water Management Gel Particle Size Percent Soluble Absorption Rate* Fade Resistance*	88% Cross linked polyacrylamide copolymer 0.3 mm to 0.8 mm, maximum 5 % < .075 mm Less than 5 % 250 - 400 times in distilled water Hard crystals, firm to touch with no more than very slight softness.
Amino Acids (Protein)	Animal and plant proteins
Fulvic Acid	Plant-derived mineral

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*Technology Based * Service Lead * Customer Driven*



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*Note - Bacteria are measured in colony forming unit's (CFU's)

Application

Mix the contents of each bag with water to form a mixture the consistency of thick gravy. Let stand for 15-20 minutes. Dip roots and plant, or package seedlings for shipment or storage. Adjust thickness of mixture to insure that the gel adheres to the roots when dipping.

Execution

Use in accordance with approved submittal for each type of planting required in strict accordance with supplier's instructions and recommendations.

Manufacturer's Service

At the request of specifier provide the services of a qualified technical representative to instruct the user in proper mixing and handling of the product.

Verification of Use

At the request of the specifier excavation of random plots of up to 1% of planted materials. Alternative procedures if product has not been used shall be required by specifier.

Free Of Charge Services Provided to Specifiers

- We do a take off for you - fax your plant list to us and we will do a take off and fax back to you the amount of materials required for the job.
- We introduce your contractors to our products - give us a list of your contractors and we will introduce, educate and provide them with installation information and list of materials for the job.
- With toll-free phone and fax lines we are at your service at a moments notice.
- We can provide verification to you that products have been purchased by the contractor.

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