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## *Specifications*

# DIEHARD™ ROOT REVIVER

### Part 1: Product Description

A vertimulch shall be used to inoculate the roots of tree and shrubs with live beneficial mycorrhizal fungi when planting. It contains highly selected endo and ectomycorrhizal fungi that will quickly colonize the roots of trees and shrubs to provide the best possible condition for the roots to grow and extract from the root zone water and nutrients. The fungi are combined with humic acids, beneficial bacteria, soluble sea kelp, yucca plant extracts, amino acids, and vitamins to promote rapid root development. To reduce transplant stress and watering maintenance, and to slow release all soluble components of the formulation, Horta-Sorb® water management gel is added to complete the package.

### Part 2: Product Specification

|  |  |
|--|--|
| Endomycorrhizal  | 6.8 Propagules per cubic centimeter of <i>Glomus mosseae</i> (1.37) <i>Glomus intraradices</i> (1.37) <i>Glomus fasciculatum</i> (1.37) <i>Glomus dussii</i> (0.68), <i>Glomus clarum</i> (0.68), <i>Glomus deserticola</i> (0.68), <i>Glomus microaggregatum</i> (0.68) |
| Ectomycorrhizal  | 300,000 spores per cubic centimeter to include: <i>Pisolithus tinctorius</i> (258,000), and <i>Rhizopogon</i> (42,000).  |
| Nitrogen Fixing, Phosphate solubilizing and Growth Promoting Bacteria. | 400,000 CFU's per cc to include: <i>Genus Bacillus</i> (32 species), <i>Genus Pseudomonas</i> (2 species), <i>Genus Streptomyces</i> (2 species).  |
| <i>Trichoderma</i>   | 3,300 CFU's per cc to include: <i>Genus Trichoderma</i> (6 species), <i>Gliocladium virens</i> (2 strains), <i>Trichoderma harzianum</i> (2 strains), <i>Trichoderma viride</i> (2 strains).   |
| Humic Acid   | 41% derived from <i>Leonardite</i>   |
| Sea Kelp Extract   | 19% <i>Ascophyllum nodosum</i>   |
| Yucca Plant Extract  | 1% <i>Yucca schidigera</i>   |
| Root Promoting Vitamins  | B, B2, B3, B6, B7, B12, C, K, Biotin, Fulvic Acid  |
| Amino Acids (Protein)  | Animal and Plant Proteins  |
| Horta-Sorb® MD Water Gel   | 5% Cross linked copolymer  |
| Particle Size  | 1.0 mm to 2.0 mm, maximum 5 % < 1.0 mm   |
| Percent Soluble  | Less than 5 %  |
| Absorption Rate  | 300 - 400 times in distilled water   |

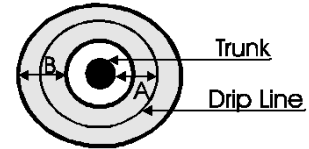


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### Part 3: Application

**Established Trees:** Make holes in a 2 ½ to 3 foot grid pattern. Mix product at a rate of 6 oz. per hole with soil removed and place into the top 6-8” of hole. The following placement is suggested:

The following placement is suggested: Method: Measure from the trunk to the drip line (A). Divide this number by 2. Measure from the drip line this amount towards the tree and outward from the drip line and treat this area (B) using a grid pattern.



**Stress Recovery - Small and newly planted trees and shrubs:** Punch holes around the root ball (4 holes per inch caliper). Apply 3 to 6 oz. per hole (2” wide x 6-8” deep) and water in.

**Transplants:** Apply 3 to 6 oz. per inch caliper or per foot diameter root ball and mix with back fill in the upper 8” of planting hole making sure inoculant is adjacent to the root ball.

### Part 4: Execution

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

### Part 5: 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.

### Part 6: Verification of Use

At the request of the specifier excavation of random plots of up to 1% of planted materials. Specifier shall require alternative procedures if product has not been used.

**END OF SECTION**

### 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 phones and fax lines we are at your service at a moments notice.

We can provide verification to you that the contractor has purchased products.