



BioWorks®
How You Grow Matters™



Use in Rockwool Systems

FORMULATIONS

PlantShield® HC (wetable powder) and RootShield® Granules (granular) are two different formulations containing the beneficial fungus *Trichoderma harzianum* strain T-22.

PREPARATION OF SOLUTION

Add the required amount of PlantShield HC to water, and periodically stir the suspension during use. It is important to remove filters with a mesh width smaller than 150 microns (= 100 mesh) before application to prevent blockage of the equipment.

PlantShield HC can be applied without using special drenching equipment. If applying through a drip irrigation system: add the required amount of PlantShield HC to 3 – 4 liters (1 gallon) of water. Let the solution stand for 10 minutes, and then stir for 5 minutes. Let the solution stand again for 1 minute and carefully pour off the liquid (containing the active ingredient) into the supply tank. Add a small amount of water to the solids to remove any remaining active ingredient. Let the solids settle for 1-2 minutes, and then add the liquid to the supply tank. Add more water to the supply tank until the required volume is obtained. Apply PlantShield HC with the second-to-last irrigation on the day of application, thus ensuring that no residue remains in the system. Or flush the system with clear water if applied last.

APPLICATION AND DOSE

Use sufficient solution to guarantee good penetration of the growing medium, but avoid run-off and excess drainage. For reference (approximate values); one (1) teaspoon of PlantShield HC weighs 2 grams (0.07 oz) and one (1) teaspoon of RootShield Granules weighs 3.5 grams (0.12 oz).

RE-APPLICATION AND DOSE

PlantShield HC should be re-applied every 6-8 weeks, at half the rate mentioned above.

PROPAGATION STAGE: apply 1.5 grams (0.05 oz) of PlantShield HC per m² (10 ft²) of cultivated area (suspended in 2.5 – 5 liters of water; 0.7 – 1.3 gallons) immediately after sowing or planting cuttings (non-rooted or rooted).

CULTIVATION STAGE: apply PlantShield HC directly after planting, at a dose of 3.0 (0.10 oz) grams per m² (10 ft²) of growing area (suspended in 10 liters of water; 2.6 gallons) or 30 grams (1.0 oz) per 1,000 pots (suspended in 100 liters of water; 26 gallons). Apply PlantShield HC at half dose (1.5 grams per m² or 15 grams per 1,000 pots) if plants were treated during the propagation stage. Repeat the treatment with PlantShield HC every 6-8 weeks, also using half the dose.

DRY APPLICATIONS DIRECTLY TO ROCKWOOL BLOCKS OR SLABS

There are several ways to make applications to rockwool blocks, according to rockwool growers.

- Apply PlantShield HC dry @ 45 mg (0.002 oz) to each hole prior to placing the cube onto the hole, or
- Apply RootShield Granules @ 500 mg (0.02 oz) per hole, or
- Apply RootShield Granules @ 500 mg (0.02 oz) between cube and slab.

For compatibility with fertilizers and pesticides, please see the [Compatibility Chart](#) available on BioWorks website.

To find out more about the BioWorks family of products, please contact us at 800-877-9443 or visit www.bioworksinc.com. © 2008 BioWorks, Inc.

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