

TRANSPLANTER MS-CS Technical Guide

CFIA Registered # 2015122A | Fertilizer Act Refer to the Package for the Guaranteed Analysis

Technical Specifications

Format and Colour:

Gray Wettable Powder

Odor: Earthy

Storage: Out of direct sunlight, below 65°C

An SDS is available upon request: info@rootrescue.com

Compatibility

- Compatible with most plants: deciduous & coniferous trees and shrubs, herbaceous perennials, annuals, vegetables and grains. Exceptions include Brassica (such as Cauliflower and Broccoli), Ericaceae (such as Rhododendrons, Azaleas, Blueberries), Dianthus (such as Carnations), and Sedum.
 For a comprehensive plant compatibility list, contact: info@rootrescue.com
- Do not use equipment previously used for herbicide or fungicide applications
- Organic and slow-release synthetic fertilizers may be used with this product at the recommended rates.
- Bone Meal is not recommended. If a phosphorus supplement is needed, use a micronized mineral phosphate product

General Guidelines

- Use any time root systems are active (or soon to be active): spring, summer, or fall. If plants will be subject to high stress (little maintenance or aftercare), a re-application 4-6 weeks after the initial treatment is recommended.
- Rinse all equipment with clean water when finished
- Do not store mixed solution use all mixed solutions within 24 hours
- Keep unused powder dry and tightly sealed in the original packaging

Typical Application Method for Planting

Step 1: Prepare planting holes

• Follow local planting recommendations: Use the correct planting method for the local soil type and site conditions.

Step 2: Mix with water

- *Standard Mixing Rate: Mix 45 grams of product in 75 Liters of water
- Small Batch: Mix 4.5 grams (1 teaspoon) in 7.5 Liters (2 Gallons) of water
- Tree Planter's Pail: Mix 11.25g (1 Tbsp.) in 18.75 Liters (5 Gallons) of water

Step 3: Agitate

• Agitate mixture every 5 minutes until application is complete

Step 4: Apply mixture

- For New Plantings: Place the plant in the planting hole and saturate the root ball with the solution. Tamp-in and saturate each layer of new soil around the roots until you reach the surface. Ensure that the final layer of soil is drenched and then apply mulch. To apply after planting, drench soil around base of plant with the solution (see the Dosage Table).
- For Established Plantings: Use a metal rod or wooden dowel to punch several 30cm (1 foot) deep holes around the active root zone of the plant. Active roots will be found at a broad band below the far spread of the plant canopy (the Drip Line). Slowly saturate the perforated ground with the solution. Repeat the application 2 times per year – or more often for stressed plants.

Dosage Table

- After planting, Transplanter can be applied as a soil drench to the root zone
- Apply the recommended quantity of solution around the base of the plant
- The amount of solution applied to each plant is based on the size of the pot or root ball (see the table)
- A raised ring of soil surrounding the planting hole will hold the solution in place during the application (see the graphic)
- The solution may be applied through a mulch layer

Pot / Root Size

Solution per Plant

6" (15 cm) 0.3 Gal. (0.75 l) 1 Gal. (3.8 L) 0.5 Gal. (1.9 l) 2 Gal. (7.5 L) 1 Gal. (3.8 l) 5 Gal. (20 L) 2.5 Gal. (9.5 l) 10 Gal. (40 L) 5 Gal. (19 l) 15 Gal. (60 L) 7.5 Gal. (28.5 l)	Flat /	Plug Tray	1 Gal.	(3.8 L)
1 Gal. (3.8 L) 0.5 Gal. (1.9 L) 2 Gal. (7.5 L) 1 Gal. (3.8 L) 5 Gal. (20 L) 2.5 Gal. (9.5 L) 10 Gal. (40 L) 5 Gal. (19 L) 15 Gal. (60 L) 7.5 Gal. (28.5 L)	4"	(10 cm)	0.132 Gal.	(0.25 L)
2 Gal. (7.5 L) 1 Gal. (3.8 L) 5 Gal. (20 L) 2.5 Gal. (9.5 L) 10 Gal. (40 L) 5 Gal. (19 L) 15 Gal. (60 L) 7.5 Gal. (28.5 L)	6"	(15 cm)	0.3 Gal.	(0.75 L)
2 Gal. (7.5 L) 1 Gal. (3.8 5 Gal. (20 L) 2.5 Gal. (9.5 10 Gal. (40 L) 5 Gal. (19 15 Gal. (60 L) 7.5 Gal. (28.5	1 Gal.	(3.8 L)	0.5 Gal.	(1.9 L)
10 Gal. (40 L) 5 Gal. (19 L) 15 Gal. (60 L) 7.5 Gal. (28.5 L)	2 Gal.	(7.5 L)	1 Gal.	(3.8 L)
15 Gal. (60 L) 7.5 Gal. (28.5	5 Gal.	(20 L)	2.5 Gal.	(9.5 L)
	10 Gal	l. (40 L)	5 Gal.	(19 L)
25 Gal. (100 L) 10 Gal. (37.5	15 Gal	l. (60 L)	7.5 Gal.	(28.5 L)
	25 Gal	l. (100 L)	10 Gal.	(37.5 L)
24" (60 cm) WB 10 Gal. (37.5	24"	(60 cm) WB	10 Gal.	(37.5 L)
	26"		13.25 Gal.	(50 L)



Application Methods and Options

- Motorized Tank Applicators: Mix thoroughly before applying. In-line filtration must allow for the passage of particles of 212 microns or smaller (# 20 screen). Once mixed, use moderate agitation or manually agitate every 5 minutes to keep the solution in suspension. Pressurized deep-root feeding, or high-volume drenching methods may be used. Keep the operating pump pressure below 200 PSI.
- Hose-end Syphon Mixers & In-line Liquid Injectors: Create a concentrate solution according to the mixing ratio setting for the equipment: i.e. if the injector adds 1-part concentrate to each 25-parts of water, then mix the Transplanter Concentrate 25 times stronger than the *<u>Standard Mixing Rate</u> of Transplanter. Keep the concentrate agitated while in use.
- Tree Water Bags 'Tree Gators': Do not put the Transplanter solution into a Tree Gator. **Recommendation:** Drench the rootball below the Tree Gator with twice the *<u>Standard Mixing Rate</u> of Transplanter – and then fill the Gator with plain water as usual.

- Root Dip Method: Transplanter can be used to dip bare-root dormant stock or rooted plugs.
 For fibrous root systems and rooted plugs, mix 13.5 grams of Transplanter in 7.5 Liters of water. For sparse or coarse root systems, use 22.5 – 45 grams of Transplanter per 7.5 Liters of water. For improved adhesion to roots, the mixture can be thickened to a slurry by adding 1-part dry powdered potters ball clay to every 20-parts water. Keep this slurry in suspension with frequent agitation.
- Mixing with Planting Media: Dry Transplanter powder may be mixed into any dry planting media before planting. The *<u>Standard Mixing Rate</u> for incorporation into dry planting media is 45 grams of powder per 100 Litres (3.5 Cu. Ft.) of media. Use 90 grams per 100 Liters (3.5 Cu. Ft.) for media used in small-cell planting trays or seedling plugs. Once planted, wet the media to activate the mycorrhizae.
- Green Roof: Apply as a drench to newly planted Green Roof installations. Mix the solution twice the *<u>Standard Mixing Rate</u> and apply as per the Table above. Note: Sedum are generally non-mycorrhizal; all other herbaceous perennials, woody ornamentals, and most annual plants will benefit from the improvement in Water Status (stress relief) that mycorrhizae provide. For best results re-apply 6 to 8 weeks after the initial inoculation.
- Turf/Sod: Application Rate: 2kg/Ha (100g / 50 sq. m). Apply the solution as a spray and then irrigate well.
 Seeding: mix powder into dampened seed just before sowing (1kg per 100 kg of seed). Sod: before the sod is installed, spray the prepared ground with a solution which delivers 100g / 50 sq. m. Irrigate well after the sod is laid.
 Hydroseeding: mix Transplanter into the hydroseeding mixture to deliver 2kg/Ha (100g / 50 Sq. m.) when applied.
- Other Applications: Transplanter is a highly concentrated Wettable Powder. The application methods listed above are some of the most frequently used. For recommendations with other planting scenarios, contact: info@rootrescue.com

Precautions

 This product contains viable spores of mycorrhizal fungi and may cause adverse effects in sensitive individuals. Use only as directed; do not ingest or inhale and avoid skin contact. This product may contain live organisms beyond those listed under the 'Guaranteed Analysis' section.

Questions?

Root Rescue Environmental Products: (416) 995-9050

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