

# roots®

# Fertilizer for Trees

**27-9-9**  
Water Dispersible Fertilizer

**APPLICATION AND RATES:**

**Soil injection:** Mix the recommended amount of ROOTS® Fertilizer for Trees with water, and inject into the soil to a depth of 8 to 10 inches. Start injections immediately past the root flare, being careful to avoid damage to large woody roots. Where possible, injections should cover the entire area beneath the canopy and just beyond the drip line.

**Standard Injection rate:** 8-Lbs per 1,250 sq. ft.

- Mix 8-Lbs (1 bag) ROOTS® Fertilizer for Trees per 100-gallons water and Inject:
- 100-gallons per 1,250 sq. ft. (2 quarts per injection on 2 ½ foot centers) or
- 5-gallons per inch DBH (diameter at breast height)

**Compacted or Nonporous Soils:** 8-Lbs per 1,250 sq. ft.

- Mix 16-Lbs (2 bags) ROOTS® Fertilizer for Trees per 100-gallons water and Inject:
- 100-gallons per 2,500 sq. ft. (1 quart per injection on 2 ½ foot centers) or
- 2 ½-gallons per inch DBH (diameter at breast height)

Any of the above regimens will apply approximately 1.7-Lbs (0.7-Kg) of nitrogen and 0.6-Lbs (0.2-Kg) of available phosphate (P<sub>2</sub>O<sub>5</sub>) and soluble potash (K<sub>2</sub>O) per 1,000 sq. ft. (100 m<sup>2</sup>).

**Soil drench:** Mix the recommended amount of ROOTS® Fertilizer for Trees with water, and drench the entire area beneath the canopy. Mix 8-Lbs (1-bag) per 100-gallons and apply:

- Established trees: Apply 100-gallons per 1,250 sq. ft.
- Containerized trees: Apply ¼ of the container volume. (example: 1 quart/gallon container)

For best results, follow with water application to rinse product into the soil. ROOTS® Fertilizer for Trees can be tank mixed with all ROOTS® Injectable products for simultaneous application.

Not formulated for foliar application. Not labeled for use on food crop sites.

**STORAGE/SHELF LIFE**

This product is stable in cool, dry storage conditions. Refer to expiration date on package.

Do not expose to direct sunlight for extended periods. ROOTS® Fertilizer for Trees will remain an excellent fertilizer, but the number of beneficial microbes may be reduced after the expiration date shown on the package.

**Precautionary Statements:**

- Keep away from heat/sparks/open flame/hot surfaces, from clothing, and from other combustible materials. No smoking.
- Take precautions to avoid mixing with combustibles.
- Avoid breathing dust.
- Wash hands and exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Wear fire/flame resistant/retardant clothing.
- IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER or doctor physician.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- IF SKIN IRRITATION OCCURS: Get medical advice/attention.
- In case of a major fire involving large quantities, evacuate area.
- Use extinguishing media suitable to local circumstances and the surrounding environment. Options include water spray, dry chemical, carbon dioxide, Halon, or fog.
- Keep out of reach of children.
- Dispose in accordance with all federal, state and local regulations.



**WARNING**

**Hazard Statements:**

- Contains an oxidizer. May intensify fire.
- Harmful if swallowed.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.

Unknown acute toxicity: 3% of the mixture consists of ingredients of unknown toxicity.

Persons with severely suppressed immune systems should contact their physician before handling ordinary microbial products.

For technical assistance, call 1-800-233-1067. Information regarding the contents and levels of metals in this product is available on the internet at <http://www.regulatory-info-lebsea.com>

**WARRANTY**

**NOTE** to the extent consistent with applicable law, Buyer assumes all responsibility for safety and performance if this product is not used according to the directions.

Not labeled for use on food crop sites.



**Net Wt 40 Lbs (18.18 Kg)**

GUARANTEED ANALYSIS	
<b>TOTAL NITROGEN (N)</b> .....	<b>27%</b>
1.0% Nitrate Nitrogen	
12.5% Urea Nitrogen	
2.5% Other Water Soluble Nitrogen*	
11.0% Water Insoluble Nitrogen*	
<b>Available Phosphate (P<sub>2</sub>O<sub>5</sub>)</b> .....	<b>9%</b>
<b>Soluble Potash (K<sub>2</sub>O)</b> .....	<b>9%</b>
Boron (B).....	0.02%
0.02% Water Soluble Boron (B)	
Copper (Cu).....	0.05%
0.05% Chelated Copper (Cu)	
Iron (Fe).....	0.10%
0.10% Chelated Iron (Fe)	
Manganese (Mn).....	0.05%
0.05% Chelated Manganese (Mn)	
Molybdenum (Mo).....	0.0009%
0.0009% Water Soluble Molybdenum (Mo)	
Zinc (Zn).....	0.05%
0.05% Chelated Zinc (Zn)	
Derived from: Ureaformaldehyde, Urea, Monopotassium Phosphate, Potassium Nitrate, Boric Acid, Iron EDTA, Manganese EDTA, Zinc EDTA, Copper EDTA and Ammonium Molybdate.	
*13.5% Slowly available Nitrogen from Ureaformaldehyde	
Potential Acidity: 920-Lb Calcium carbonate equivalent per ton	
<b>ALSO CONTAINS NON PLANT FOOD INGREDIENTS</b>	
<b>SOIL/PLANT AMENDING INGREDIENTS</b>	
<b>Active Ingredients</b>	
<b>Rhizosphere Bacteria</b> .....	20 Million cfu/g
4.5 Million cfu/g <i>Bacillus licheniformis</i>	
4.5 Million cfu/g <i>Bacillus megaterium</i>	
1 Million cfu/g <i>Bacillus polymyxa</i>	
4.5 Million cfu/g <i>Bacillus pumilus</i>	
4.5 Million cfu/g <i>Bacillus subtilis</i>	
1 Million cfu/g <i>Paenibacillus azotofixans</i>	
<b>MICROBIAL NUTRIENTS</b> .....	3.3%
2.2% Soluble Seaweed Extract (derived from <i>Ascophyllum nodosum</i> )	
0.8% Maltodextrin	
0.3% Yeast Extract	
Humic Acids (derived from Leonardite).....	1.8%
*RZ-3 Surfactant (alkoxylated glucopyranoside)....	2.8%
<b>INERT INGREDIENTS</b> .....	
91.1% Fertilizer	
1.0% Leonardite extract (other than humic acids)	

\*RZ-3 is a proprietary surfactant, U.S. Patent # 6,460,290.

F699



Expiration Date:

G/17