

Cut Here

NEW  
Look!

*roots*<sup>®</sup>

Press Here To Close

# PHC<sup>®</sup> BioPak<sup>®</sup> Plus

**3-0-20**

**Micronutrient and  
Microbial Inoculant**

- Promotes growth
- Microbial soil inoculant
- Soil injection or drench use



LebanonTurf

Manufactured by: Lebanon Seaboard Corporation . 1600 E. Cumberland St. Lebanon, PA 17042

Made in the USA . [www.LebanonTurf.com](http://www.LebanonTurf.com)

Net Wt. 1-Lb (454-g)

**ROOTS® PHC® BioPak® Plus** is a premium dry, soluble 3-in-one fertilizer, microbial nutrient, and microbial inoculant treatment for ornamentals, trees, or turf maintenance to improve vigor of plants growing in stressed conditions. Also included are humic acids, which may aid in mineral nutrient uptake.

**DIRECTIONS FOR USE:**

**Tree/Shrub care Soil Injection:** Mix 1 to 5-Lb per 50 gallons to treat 1250 sq. ft. (For general treatments, apply 3-Lbs per 50 gallons.) Inject the entire area beneath the canopy every 2.5-feet, with a volume of 1-qt. per injection.

**Drench treatment for Turf/Flower beds:** Mix with water to apply 5-Lbs per acre (1-Lb per 10,000 sq. ft.) every month. Follow with water application to rinse product into the soil. See inside box for complete directions.

**HEALTH AND SAFETY:**

Wash hands after handling. Avoid contact with eyes or broken skin. Avoid inhaling dust or mist. In case of ingestion, seek medical attention. In case of allergic reactions, treat symptoms and contact physician.

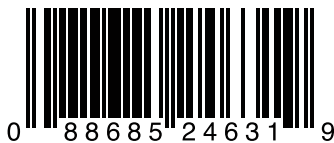
**KEEP OUT OF REACH OF CHILDREN.**

**STORAGE:** Store in a dry location. Avoid prolonged storage under conditions of high humidity.

**TECHNICAL ASSISTANCE:** For technical assistance, call 1-800-233-1067.

**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.



Information regarding the contents and levels of metals in this product is available on the internet at <http://www.regulatory-info-lebsea.com>

**Not labeled for use on food crop sites.**

GUARANTEED ANALYSIS	
<b>Total Nitrogen (N)</b> .....	<b>3%</b>
3.0% Urea Nitrogen	
<b>Soluble Potash (K<sub>2</sub>O)</b> .....	<b>20%</b>
<b>Magnesium (Mg)</b> .....	<b>1.5%</b>
1.5% Water Soluble Magnesium (Mg)	
<b>Sulfur (S)</b> .....	<b>4.0%</b>
4.0% Combined Sulfur (S)	
<b>Boron (B)</b> .....	<b>0.02%</b>
0.02% Water Soluble Boron (B)	
<b>Iron (Fe)</b> .....	<b>7.0%</b>
7.0% Chelated Iron (Fe)	
<b>Manganese (Mn)</b> .....	<b>0.2%</b>
0.2% Chelated Manganese (Mn)	
<b>Zinc (Zn)</b> .....	<b>0.2%</b>
0.2% Chelated Zinc (Zn)	
Derived from: Urea, Potassium Sulfate, Iron Citrate, Sodium Tetraborate, Magnesium Hydroxide, Manganese EDTA, Zinc EDTA, Kelp Extract.	
<b>ALSO CONTAINS NON PLANT FOOD INGREDIENTS</b>	
<b>SOIL/PLANT AMENDING INGREDIENTS</b>	
<b>Active Ingredients</b>	
<b>Rhizosphere Bacteria</b> .....	<b>18.6 Million cfu/g</b>
4.2 Million cfu/g <i>Bacillus licheniformis</i>	
4.2 Million cfu/g <i>Bacillus megaterium</i>	
900,000 cfu/g <i>Bacillus polymyxa</i>	
4.2 Million cfu/g <i>Bacillus subtilis</i>	
4.2 Million cfu/g <i>Bacillus pumilus</i>	
900,000 cfu/g <i>Paenibacillus azotofixans</i>	
<b>Humic acids (derived from Leonardite)</b> .....	<b>3.6%</b>
<b>MICROBIAL FOOD</b> .....	
3.2% Maltodextrin	
3.0% Seaweed extract (derived from <i>Ascophyllum nodosum</i> )	
1.9% Yucca plant extract (derived from <i>Yucca schidigera</i> )	
<b>INERT INGREDIENTS</b> .....	
88.3%	
81.0% Fertilizer Ingredients	
4.6% Polyethylene glycol	
1.7% Leonardite extract (other than humic acids)	
1.0% Precipitated silica	
<b>F699</b>	

APPLICATION RATES				
ORNAMENTAL PLANTS/POTTED PLANTS				
Application	Roots® PHC® BioPak® Plus	Water Volume	Method of Application	Coverage
New plantings	1 pound	25 gallons	Drench or spray to soil saturation	1,000 square feet
Maintenance	1 pound	25 gallons	Drench or spray to soil saturation	2,000 square feet
Pre-Digging/Transplanting	3 pounds	100 gallons	Drench 2 days prior to digging and immediately after installation	5 gallons per caliper inch or to soil saturation
Flower Beds	1 pound	25 to 50 gallons	Drench or spray to soil saturation	10,000 square feet
TREES/SHRUB CARE RATES				
Application	Roots® PHC® BioPak® Plus	Water Volume	Method of Application	Coverage
Initial Application	2 pounds	50 to 100 gallons	Soil inject, drench or spray	1,000 square feet
Maintenance	1 pound	50 to 100 gallons	Soil inject, drench or spray	1,000 square feet
Iron Deficiency	3 pounds	50 to 100 gallons	Soil inject, drench or spray	1,000 square feet
TURF CARE RATES				
Application	Roots® PHC® BioPak® Plus	Water Volume	Frequency	Coverage
Lawns	1 pound	50 to 100 gallons	Monthly or as needed	10,000 square feet
New Seeding/Overseeding	1 pound	50 to 100 gallons	Every 2 to 4 weeks as needed	10,000 square feet
Hydroseeding	5 pound	Tank Mix at seeding	At time of seeding	1 acre
Sod Installation	1 pound	50 to 100 gallons	2 to 3 days prior to harvest or after installation	10,000 square feet
IN-LINE SYSTEMS				
Fertigation	Roots® PHC® BioPak® Plus	Mix Tank	Dilution Setting	Procedure
Dosatron	5 pounds	5 gallons	1:100	After application, rinse water through system

Expiration Date: