Healthy Start® 3-4-3

Healthy Start 3-4-3 is a granular fertilizer formulated to address numerous aspects of soil fertility. It contains only natural fertilizer ingredients to provide a slowly releasing source of NPK, to immediately increase the organic content of the soil, and to improve microbial activity. In addition, the product contains six species of beneficial rhizosphere bacteria to provide a sustainable fertilizing effect. Use Healthy Start 3-4-3 as a general fertilizer when planting or potting, or as a topdressing on already established lawns and gardens. *Healthy Start® 3-4-3:*

- Provides slowly released NPK fertility derived from natural sources
- Slowly releases its nutrients as it biodegrades
- Increases the organic content of the soil
- Acts as a food source for its beneficial bacteria
- Introduces six selected species of beneficial bacteria that fix nitrogen from the air, solubilize phosphorus, and release minerals from organic matter in the root zone
- Will not burn plants

**DIRECTIONS FOR USE**

**SOIL AMENDMENT:** Apply 25 pounds per 1000 square feet. In very poor soil, double the rate.

**SEED/SOD INSTALLATION:** Broadcast or spread one 25 pound bag per 2500 square feet, then seed or lay sod.

**SOIL PREP FOR GARDENS AND FLOWER BEDS:** Apply 25 pounds per 1000 square feet. In very poor soil, double the rate. Rototill into the upper 2 to 4 inches before planting.

**BULBS OR SPRINGS:** Add 1 teaspoon per plant and mix with soil in planting hole.

**POTTING MIX:** Mix into potting soil at a rate of 25-lbs per cubic yard.

**POTTED PLANTS:** 1/4 pound per 1 gallon container.

**TOP DRESSING:** 25 pound bag per 2000 square feet.

**ESTABLISHED TREES AND SHRUBS:** Broadcast 2 pounds per 100 square feet over soil or surface mulch.

**PLANTING TREES AND SHRUBS:** Mix into the backfill around the root zone when planting, following the rate chart below:

<table>
<thead>
<tr>
<th>Application Rates</th>
<th>1 gallon plant</th>
<th>5 gallon plant</th>
<th>15 gallon plant</th>
<th>24 inch root ball</th>
<th>36 inch root ball</th>
<th>42 inch root ball</th>
<th>54 inch root ball</th>
<th>72 inch root ball</th>
<th>Larger Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 cup or 1/4 pound</td>
<td>2 cups or 1/2 pound</td>
<td>4 cups or 1 pound</td>
<td>6 cups or 1.5 pounds</td>
<td>10 cups or 2.5 pounds</td>
<td>12 cups or 3 pounds</td>
<td>16 cups or 4 pounds</td>
<td>20 cups or 5 pounds</td>
<td>1/2 pound per inch of trunk diameter</td>
</tr>
<tr>
<td></td>
<td>100 plants per 25-lb bag</td>
<td>50 plants per 25-lb bag</td>
<td>25 plants per 25-lb bag</td>
<td>16 plants per 25-lb bag</td>
<td>10 plants per 25-lb bag</td>
<td>8 plants per 25-lb bag</td>
<td>6 plants per 25-lb bag</td>
<td>5 plants per 25-lb bag</td>
<td></td>
</tr>
</tbody>
</table>

**SPREADER SETTINGS**

<table>
<thead>
<tr>
<th>Rate 1000 ft²</th>
<th>Earthway Drop Spreader</th>
<th>Earthway Broadcast Spreader</th>
<th>Scotts Drop AccuGreen</th>
<th>Scotts Drop Precision Green</th>
<th>Speedy Green</th>
<th>AccuPro 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>23 (4x)</td>
<td>28 (8x)</td>
<td>18 (4x)</td>
<td>17 (4x)</td>
<td>18 (5x)</td>
<td>Z (6x)</td>
</tr>
<tr>
<td>25</td>
<td>23 (2x)</td>
<td>28 (6x)</td>
<td>18 (2x)</td>
<td>17 (2x)</td>
<td>10 v2 (3x)</td>
<td>W (3x)</td>
</tr>
</tbody>
</table>

**Average width of spread**

- Overlap Wheels 13-ft
- Overlap Wheels 5-ft
- 10-ft Cone 8

**NOTE:** 2X means 2 passes

**BIOFERTILIZER AND SOIL AMENDMENT TO INCREASE ORGANIC CONTENT AND BIOACTIVITY**

**GUARANTEED ANALYSIS 3-4-3**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nitrogen (N)</td>
<td>3%</td>
</tr>
<tr>
<td>2.8% Water Insoluble Nitrogen</td>
<td></td>
</tr>
<tr>
<td>0.2% Water Soluble Nitrogen</td>
<td></td>
</tr>
<tr>
<td>Available Phosphate (P₂O₅)</td>
<td>.4%</td>
</tr>
<tr>
<td>Soluble Potash (K₂O)</td>
<td>.3%</td>
</tr>
</tbody>
</table>

Derived From: Blood Meal, Fish Meal, Meat Meal, Feather Meal, Bone Meal, and Natural Sulfate of Potash.

**SOIL AMENDING INGREDIENTS**

- Humic Acids: 2%
- Maltodextrin: 0.2%
- Fertilizer Ingredients: 96.6%
- Inert Ingredients: 1.2%
- 1.2% Leonardite (other than humic acids)

- *Rhizosphere Bacillus spp.*
  - 28 Million cfu/Lb: *Bacillus licheniformis*
  - 28 Million cfu/Lb: *Bacillus megaterium*
  - 28 Million cfu/Lb: *Bacillus polymyxa*
  - 28 Million cfu/Lb: *Bacillus subtilis*
  - 28 Million cfu/Lb: *Bacillus thuringiensis*
  - 28 Million cfu/Lb: *Paenibacillus azotofixans*

**CONTAINS NO MANURE, SEWAGE OR SLUDGE INGREDIENTS**

**STORAGE/SHELF LIFE**

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

**PACKAGING**

- 5-Lb jug, 25 and 50-Lb bag

**BULK DENSITY**

28 pound per cubic foot

**HEALTH AND SAFETY INFORMATION**

- In case of allergic reaction(s), treat symptoms and contact physician.
- In case of ingestion, seek medical attention.
- Keep out of reach of children.

**TECHNICAL ASSISTANCE**

For technical assistance, call 1-800-421-9051

Plant Health Care, Inc. • 440 William Pitt Way Pittsburgh, PA 15238 • Tel: (800) 421-9051
Fax: (412) 826-5445 • www.planthalthcare.com
© 2004 Plant Health Care, Inc.

LIMITED WARRANTY: Plant Health Care, Inc. offers for sale the product Healthy Start® 3-4-3. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE which extend beyond the description of the product in this specification sheet or other product literature, and liability of Plant Health Care, Inc. is limited to replacement of any product which does not meet these specifications. Suggestions for use and information on results obtained with its use are assumed by the manufacturer to be reliable. Since conditions of use are outside the control of Plant Health Care, Inc. the buyer is responsible for all results, including injury and damage stemming from the use of this product alone or in combination with other materials.