



Product Information

NUTRIO™ POWERSHIFT™ is a liquid biological soil amendment combined with a low salt index, high orthophosphate fertilizer designed for starter or pop-up applications. The seven species of beneficial soil bacteria contained in NUTRIO POWERSHIFT have been shown in independent studies to elevate yields when combined with pop-up fertilizers over the pop-up fertilizer alone. NUTRIO POWERSHIFT may be applied below, to the side or in the seed furrow of most crops depending on local conditions and established agricultural practices. NUTRIO POWERSHIFT contains fully chelated EDTA and IDS copper, zinc and manganese. NUTRIO POWERSHIFT should be used as part of a comprehensive Total Nutrition System® for optimizing plant growth, development, soil health, yield and quality.

Features and Benefits

- High orthophosphate content for immediate availability, even in cold soils
- Ultra-low salt index – safe for direct seed application and application to tender foliage
- Contains EDTA / IDS chelated micronutrients for maximum compatibility and plant uptake
- Stimulates seedling root growth, emergence and overall plant vigor
- Enhances phosphorus availability
- Improves stress tolerance
- Increases plant growth and yield

Benefits Attributed to Beneficial Soil Bacteria

- Organic matter mineralization
- Enhances phosphorus availability
- Plant growth promotion and development
- Enhances resistance to stress
- Stabilization of soil aggregates
- Retention of nutrients in the soil-plant system
- Increases plant growth and yield

Guaranteed Analysis

| | |
|---|--------|
| Total Nitrogen (N) | 6.00% |
| 5.60% Ammoniacal Nitrogen | |
| 0.40% Water Soluble Nitrogen | |
| Available Phosphate (P ₂ O ₅)..... | 22.00% |
| Soluble Potash (K ₂ O) | 6.00% |
| Boron (B) | 0.02% |
| Copper (Cu) | 0.05% |
| 0.05% Chelated Copper | |
| Manganese (Mn) | 0.06% |
| 0.06% Chelated Manganese | |
| Zinc (Zn) | 0.46% |
| 0.46% Chelated Zinc | |

Derived From: Ammonium Phosphate, Potassium Phosphate, Boric Acid, Copper EDTA and IDS, Manganese EDTA and IDS, and Zinc EDTA and IDS.

CONTAINS NON-PLANT FOOD INGREDIENTS:

Contains 3 million colony forming units (CFU) per gallon of the following:

| | |
|---|-------------------------------|
| <i>Rhodopseudomonas palustris</i> | 1.13 x 10 ² CFU/ml |
| <i>Bacillus brevis</i> | 1.13 x 10 ² CFU/ml |
| <i>Bacillus licheniformis</i> | 1.13 x 10 ² CFU/ml |
| <i>Streptomyces griseus</i> | 1.13 x 10 ² CFU/ml |
| <i>Bacillus megaterium</i> | 1.13 x 10 ² CFU/ml |
| <i>Rhodococcus rhodochrous</i> | 1.13 x 10 ² CFU/ml |
| <i>Lactobacillus plantarum</i> | 1.13 x 10 ² CFU/ml |



Directions for Use

Moisture conditions and planting strategies are important considerations when using **NUTRIO POWERSHIFT**. **NUTRIO POWERSHIFT** is most effective when placed near seed or plant roots to maximize the activity of the beneficial microbes contained in **NUTRIO POWERSHIFT**.

POP-UP APPLICATIONS: Apply 2-5 gallons per planted acre on seed as established by local agricultural practices. **NUTRIO POWERSHIFT** may be diluted with water for ease of calibration if needed. When applied in the seed furrow on very dry soils, a post plant irrigation within 24 hours is recommended. Use **CAUTION** when applying directly to the seed in very saline soils as there may be a risk of seedling injury.

STARTER APPLICATIONS: Apply 1-8 gallons per acre as a band directly below the seed or 5-20 gallons below and to the side of the seed line. **NUTRIO POWERSHIFT** may also be applied as a surface spray band over the top or to the side of the seed prior to planting. Bluegrass, canola, rape, mustard, and other small seed crops should have **NUTRIO POWERSHIFT** placed no closer than 2 inches from the seed.

NUTRIO POWERSHIFT can be applied through center pivot or drip irrigation systems, but check your water source prior to application for calcium or other impurities. Always jar test with water source for precipitation prior to actual field use.

Compatibility

The compatibility of **NUTRIO POWERSHIFT** with other products may vary. Always jar test new combinations for compatibility prior to field mixing. Do not mix **NUTRIO POWERSHIFT** with calcium fertilizers. Do not combine with strong acids or bases such as urea sulfuric acid or aqua ammonia.