



AminoPrecise®

# Manganese

3-0-0

Foliar-Pak® Manganese with AminoPrecise® uses specific amino acids to fully chelate the manganese ion, which allows for maximum foliar entry into the plant.

## PRODUCT DESCRIPTION/BENEFITS

Foliar-Pak Manganese with AminoPrecise is a newly formulated fertilizer that increases manganese content in plants by offering the following advantages:

- Protected by a 2:1 ratio of amino acids to manganese, the manganese is fully chelated by amino acids.
- Complete chelation of the manganese ion maximizes the solubility of the complex, and the protection given to manganese, which increases foliar entry into the plants, while also ensuring a more efficient movement through the vascular system.
- The amino acids used help the plant build better energy through increased photosynthesis, nitrogen fixation, and anti-stress molecule production. In addition to this, in warm season plants, the amino acids aid in carbon fixation.

Acting in concert with amino acids, manganese is a component of a few different enzymes—one of which helps protect mitochondria from tissue-damaging oxygen-radicals. There is also a manganese-protein complex found in the thylakoid membranes that assist in the splitting of water molecules. Aside from these, manganese is mostly used as an activator of enzymes such as dehydrogenases, transferases, hydroxylases, and decarboxylases. Many of these enzymes are involved in carbon and nitrogen metabolism, and also play a role in secondary metabolite production such as phenolics, cyanogenic glycosides, and lignin plant defense compounds—which are all important for plant defense systems.

## GUARANTEED ANALYSIS

Total Nitrogen (N) .....	3.0%
3.0% Water Soluble Nitrogen	
Manganese (Mn) .....	6.0%
6.0% Water Soluble Manganese (Mn)	

Derived from: soy protein hydrolysate, manganous oxide

## GENERAL USE GUIDE

Used to increase the manganese content in plants and soil where manganese deficiencies are present. This product is tank mix compatible with most fertilizers and pesticides. However, due to variability in water sources and pesticide formulations a compatibility test is recommended.

**Golf Course Greens,  
Tees and Fairways  
Sports Turf  
Lawns**

Apply 0.25 to 1.5 fl oz per 1000 sq ft in enough water to provide sufficient foliar coverage.  
Repeat application every 7 to 21 days or as determined by tissue tests.

## PRODUCT INFORMATION:

Weight per Gallon: 10.3 lbs (4.7 kg)  
pH: 4.5

foliar

soil

**NOTICE:** ENP Investments LLC warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. ENP Investments LLC will not be responsible for incidental or consequential damage resulting from the use of this product contrary to instructions or under abnormal conditions or under conditions not reasonably foreseeable to ENP Investments LLC.

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