

# NUE Manganese 5%

## 4-0-0 Guaranteed Analysis

<b>Total Nitrogen (N)</b> .....	<b>4%</b>
2.5% Nitrate Nitrogen	
1.5% Water Insoluble Nitrogen*	
<b>Manganese (Mn)</b> .....	<b>5%</b>

Derived from: Manganese Nitrate and Glycine  
\*1.5% Water Insoluble Nitrogen derived from Glycine

### GENERAL INFORMATION

NUE Manganese 5% is manufactured specifically as a liquid foliar run fertilizer to be used to help prevent and correct manganese deficiencies that may limit crop growth and yields. NUE Manganese 5% is a supplement to an adequate and balanced soil fertility program. NUE Manganese 5% is a mixture of non-sulfate sources of manganese, allowing for blending with calcium products, specifically NUE Cal-8.

It is important to monitor crop needs and responses by maintaining an adequate tissue-testing program. When unfamiliar with the effects of foliar applications of minerals it is recommended to perform small-scale field trials.

### DIRECTIONS FOR USE

#### Mixing Directions

1. Be sure spray tank is thoroughly cleaned.
2. Fill 1/2 full with clean water and start agitation.
3. Add other nutrients if compatible.
4. Add NUE Manganese 5% and continue agitation.
5. Adjust pH if necessary.
6. Add pesticides if compatible.
7. Fill tank and agitate thoroughly.

**Compatibility** - NUE Manganese 5% is compatible with most pesticides.

For maximum nutritional results with tank mixes containing NUE Manganese 5% adjust the final pH to 5.0 -7.0. Use NUE Cal-8 raise to pH of the final tank mix, if necessary. When tank mixing NUE Manganese 5% with pesticides requiring specific pH ranges, always follow pesticide label directions. Always check compatibility with a jar test before mixing with other fertilizers (i.e. phosphorus). If any precipitation occurs, it may be necessary to add a compatibility agent. Consult your Bio-Gro dealer for more information.

**Dilution and Spray Volumes** - Always use enough water for uniform application and to prevent possible plant tissue damage to the intended crop from concentrated droplets. It is recommended to use a dilution of at least 20 parts of water to 1 part of NUE Manganese 5%.

### SUGGESTED APPLICATIONS

Optimum rate of application will vary between fields depending on soil and/or climatic conditions, stage of crop growth and size of plants.

Application rates are best determined by soil and plant analysis recommendations.

NUE Manganese 5% can be used on many crops where foliar manganese applications are commonly used. Consult your Bio-Gro dealer for specific recommendations.

### FOLIAR APPLICATION RATES

**Field Crops:** Apply 16 to 32 ounces/acre as a directed foliar spray during periods of rapid growth or nutritional demand once plants have reached 4-8 inches in height. Two applications of NUE Manganese 5% may be applied at 10 to 14 day intervals.

**Vegetable Crops:** Foliar rate is 16 to 32 ounces/acre. Apply NUE Manganese 5% as needed up to three applications throughout vegetative development and/or during rapid fruit growth.

**Tree and Vine Crops:** Apply 16 to 32 ounces/acre during growing season. Applications during veraison should be limited to 16 ounces /acre and used with appropriate adjuvant unless experience dictates otherwise. Three applications may be made in 10 to 21 day intervals.

**Berry Crops:** Apply 8 to 32 ounces/acre of NUE Manganese 5% after active vegetative growth begins. Three applications may be repeated in 7 to 14 day intervals.

**TIMING** - Application timing is likely the most important factor in determining the response and value of foliarly applied nutrients. Understanding the basic physiological functions of a crop is essential in planning proper nutrient timing.

### CONDITIONS OF SALE

Seller and/or manufacturer warrants only that this product consists of the ingredients specified on this label. No one is hereby authorized to make any warranty and/or guarantee concerning the use of this product. Being that the use, timing, placement, rate, application and other conditions are beyond the control of the seller and/or manufacturer, the seller's and/or manufacturer's liability for handling, storage and use of this product is limited to replacement of product or refund of purchase price.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>



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### Chelated Manganese Solution



#### WARNING

H315: Causes skin irritation.  
H318: Causes serious eye irritation.

#### PRECAUTIONARY STATEMENTS

Keep out of reach of children. Read label before use. Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood.  
Do not taste or swallow.

**10.1 lbs/gallon @ 68° F (1.21 kg/liter)**

Net Contents: 2 x 2.5 Gal (2 x 9.46 L)  Net Contents: \_\_\_\_\_  
 Net Contents: 250 Gal (946 L)