

# 4% MANGANESE

## LIQUID MICRONUTRIENT

4-0-0

### GUARANTEED ANALYSIS

Total Nitrogen (N) .....	4.0%
4.0%.....	Ammoniacal Nitrogen
Sulfur (S) .....	2.5%
2.5% Combined Sulfur (S)	
Manganese (Mn) .....	4.0%
4.0% Water Soluble Manganese (Mn)	
Derived from anhydrous ammonia and manganese sulfate	



**WARNING:** Causes eye irritation. May be harmful in contact with skin. Harmful if swallowed. Avoid breathing dust / fume / gas / mist / vapors / spray. Avoid release to the environment. Wear protective gloves and eye / face protection. If eye irritation persists: get medical attention. IF IN EYES: Rinse with water for 15 to 20 minutes. Remove contact lenses, if present, and continue rinsing eyes. IF ON SKIN: Wash with plenty of water for 15 to 20 minutes. If medical advice is needed, have product container or label available. Keep out of reach of children. Read label before use.

Net Contents 5 gallons (18.9 liters)  
11.0 lbs. per gallon (1319 grams/liter) @ 68° F

Net Contents 265 gallons (1003.1 liters)  
11.0 lbs. per gallon (1319 grams/liter) @ 68° F

### DIRECTIONS FOR USE

Actagro® 4% Manganese can be applied to most vegetable and cucurbit crops, field and row crops, deciduous fruit and nut trees, grapes, berries, olives, avocados and citrus. Actagro® 4% Manganese is designed for soil application and for foliar use. Apply directly to soils or inject through irrigation systems where water quality is satisfactory to maintain solubility. Foliar applications should be as a dilute spray. Application rates vary by crop or situation. Mixing with irrigation water for field storage is generally not recommended. Products blended with irrigation water should be used immediately and not stored for prolonged periods.

### FOLIAR APPLICATION RATES

**FIELD AND ROW CROPS:** Apply 1 to 4 quarts per acre in a minimum of 10 gallons of water per acre. May be applied through center pivot irrigation systems. Repeat applications may be beneficial.

**VEGETABLE & FRUIT CROPS, ORCHARDS & VINEYARDS:** Apply 1 to 4 quarts per acre. Aerial applications use a minimum of 10 gallons of water per acre. Dilute or concentrate sprays use a minimum of 25 gallon of water per acre. Repeat applications may be beneficial.

### SOIL APPLICATION RATES

Actagro® 4% Manganese may be applied pre-plant, as a starter, side dress, fertigated, top dressed or banded to the soil. Dilute with water (if necessary) to ensure uniform distribution.

**FIELD & ROW CROPS, VEGETABLES & FRUIT CROPS:** Apply 1 to 8 quarts per acre in a surface or sub-surface band. Repeat applications are beneficial. **ORCHARDS & VINEYARDS:** Inject 1 to 8 quarts per acre 3 to 5 inches deep at the drip line, or surface band and water into the soil. Repeat applications may be beneficial.

### FERTIGATION APPLICATION RATES

**FIELD & ROW CROPS, ORCHARDS & VINEYARDS, VEGETABLES & FRUIT CROPS:** Use 1 to 8 quarts per acre per irrigation. Continue irrigation for a minimum of 2 hours after application to flush lines and to maximize nutrient distribution with drip and micro sprinkler use. Repeat applications may be beneficial.

**APPLICATION THROUGH DRIP IRRIGATION** - inject after irrigation filter.

**TRANSPLANT WATER - ALL CROPS:** Apply 1 to 4 quarts per acre in a minimum of 50 gallons solution.

### GENERAL INFORMATION

Actagro® 4% Manganese is formulated in a proprietary process for the prevention or correction of manganese deficiencies in plants and can be effectively used for both foliar and soil applications.

**CAUTION:** Actagro® 4% Manganese should be agitated daily. Do not apply with calcium based fertilizers such as CAN 17. Fertilizer solutions with a pH of 5 or less may not be compatible. Combining with liquid fertilizer solutions is more effective if done at a blending plant.

**CAUTION:** Foliar application of Actagro® 4% Manganese close to harvest may leave a brown residue on the harvestable portion of the crop. Rainfall, sprinkler irrigation or high humidity should alleviate this condition.

Actagro® 4% Manganese will be influenced by differences in varieties, soil and environmental conditions and should be applied under conditions of optimum plant growth. Optimum conditions are defined as adequate humidity, moderate temperatures and adequate soil moisture. Optimum conditions for most crops generally occur during early morning or late evening hours.

**WARRANTY:** Since weather, crops, soil and other conditions may vary, neither Actagro®, LLC, nor the Seller make a warranty of any kind, expressed or implied, concerning the use of this product. The user assumes all risk of use and handling whether or not in accordance with directions or suggestions.

**KEEP OUT OF REACH OF CHILDREN. HARMFUL IF SWALLOWED. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.** In case of contact immediately flush skin, eyes or clothing with plenty of water for at least 15 minutes.

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

\*Not all Actagro® products are compatible with one another or when mixed with other fertilizers and/or pesticides on the market. A small scale compatibility test is recommended prior to mixing.

### MIXING INSTRUCTIONS

1. Partially fill tank with water or fertilizer and start agitation..
2. Add other nutrients or pesticides if compatible.
3. Add Actagro® 4% Manganese to circulating tank mix.
4. Fill tank and agitate thoroughly.

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