

Manganese Chelate • EDTA

### Fully Chelated Micronutrient for Plant Nutrition

15 258 082520

# **ChelStar Liquid 5% Manganese Chelate EDTA** and the application method. Avoid applying **GUARANTEED ANALYSIS** this product when plants are suffering from

Manganese (Mn)......5.0%

5.0% Chelated manganese

Derived from manganese ethylenediaminetetraacetate.

### **CAUTION: KEEP OUT OF REACH OF CHILDREN**

**Precautionary Statements:** Based on currently available data, this product is not classified as a hazardous substance. However, observe good industrial hygiene practices. Wash hands after handling.

GENERAL INFORMATION: ChelStar Liquid 5% Manganese Chelate EDTA is a fully chelated, liquid form of manganese EDTA useful for prevention and correction of manganese deficiency in crops. Soil application is the preferred application method to prevent manganese deficiency. Foliar application, however, will provide correction when a soil application is impractical. This product may be mixed and applied to soil with slightly acidic to moderately alkaline liquid NPK fertilizers with a pH range of 3 to 11.

### **SOIL APPLICATION DIRECTIONS:**

Apply *ChelStar Liquid 5% Manganese Chelate EDTA* to acid and mildly alkaline soils. This product is a concentrated solution that can be added to water or mixed with liquid fertilizers for optimum delivery and coverage. For trees or individual plants, this product may be applied directly on the soil uniformly under the plant's drip line then watered in. Soil applications may also be made by adding to water then mixing or metering into drip, sprinkler, or furrow irrigation systems.

**FOLIAR APPLICATION DIRECTIONS:** ChelStar Liquid 5% Manganese Chelate EDTA may be applied in water or in combination with most pesticides. Buffer the spray solution to a pH of 6 to 6.5 for best performance. Thorough coverage and the use of wetting agents often enhance nutrient uptake from foliar sprays. Application rates and dilution factors depend on crop sensitivity, the amount of foliage to be sprayed,

and the application method. Avoid applying this product when plants are suffering from moisture stress. If there is any doubt, apply the spray solution to a small test area of the crop or foliage to assess any undesirable effects or phytotoxicity before general application.

**AERIAL APPLICATION DIRECTIONS:** Apply 0.5 to 1 pt. of *ChelStar Liquid 5% Manganese Chelate EDTA* per acre in at least 10 gal. of water. For application timing and frequency, refer to appropriate foliar recommendation below.

## CROP RECOMMENDATIONS – SOIL APPLICATION

VEGETABLE CROPS (including beans, celery, cucumbers, lettuce, melons, onions, peas, peppers, potatoes, sweet corn, tomatoes) and FIELD CROPS (including alfalfa, corn, dry beans, forage grasses, peas, rice, safflower, sorghum, sugar beets, sugarcane): Apply ChelStar Liquid 5% Manganese Chelate EDTA at 2 to 10 qts. per acre.

FRUIT, NUT & VINE CROPS (including almond, apple, apricot, avocado, berry, cherry, citrus, grape, mango, olive, pear, peach, pistachio, plum, walnut): Apply ChelStar Liquid 5% Manganese Chelate EDTA at 2 to 12 qts. per acre or 2 to 10 Tbsp. per inch of tree diameter.

ORNAMENTAL SHRUBS & TREES (including azaleas, gardenias, junipers, pines, roses): Apply *ChelStar Liquid 5% Manganese Chelate EDTA* at 2 Tbsp. for small shrubs and up to 2 Tbsp. per inch of tree diameter for large trees and shrubs.

TURF: Apply 1.5 pts. per 1,000 sq. ft. or 8 gal. per acre.

**Note:** the rates provided above are based on broadcast application. If broadcast rates are used for spot or banded applications, phytotoxicity may result.

### CROP RECOMMENDATIONS – FOLIAR APPLICATION

TREES (CITRUS): Apply ChelStar Liquid 5% Manganese Chelate EDTA at 1 to 2 pts. per 100 gal. of cover spray any time except during bloom.

FRUIT, TREE & VINE CROPS (excluding citrus): Apply ChelStar Liquid 5% Manganese Chelate EDTA at 1 to 2 pts. per acre in sufficient spray volume for thorough coverage (25 gal. minimum) at dormant/delayed dormant before bloom, then after full bloom at 2 to 3 week intervals as needed. NOTE: For smooth-skinned fruit (peach, pear, apple, etc.) apply 1 pt. per acre in 50 to 100 gal. of water.

**VEGETABLE & FIELD CROPS** (ground equipment only): Apply *ChelStar Liquid 5% Manganese Chelate EDTA* at 1 to 2 pts. per acre in sufficient spray volume for thorough coverage (20 gal. minimum).

**AERIAL:** Apply at 0.5 to 1 pt. per acre with sufficient spray volume for thorough coverage (10 gal. minimum).

Information regarding the contents and levels of metals in this product is available on the Internet at http://www.aapfco.org/metals.html.

**Storage and Disposal:** Do not contaminate water, food or feed by storage or disposal. Keep out of reach of children. Store away from incompatible materials. Dispose of contents/container in accordance with local authority requirements.

#### **CONDITIONS OF SALE AND WARRANTY**

Chemurgic Agricultural Chemicals, Inc. warrants that this product conforms to the chemical description on the label and is reasonably suited for the purposes stated when used as recommended under normal conditions.

Unintended consequences such as crop damage or poor performance may result from factors including, but not limited to, method of application, timing, crop and soil condition, weather, and other materials present, all of which are beyond the control of *Chemurgic Agricultural Chemicals, Inc.* and Seller.

Chemurgic Agricultural Chemicals, Inc. neither makes, nor authorizes any agent or representative to make any other warranties, expressed or implied, including fitness or merchantability.

Buyer and user acknowledge and assume all risks and liability resulting from the handling, storage and use of this material.

In no case shall *Chemurgic Agricultural Chemicals, Inc.* or the Seller be liable for consequential, special, indirect, or incidental damages or losses resulting from the handling or use of this product.

The foregoing is a condition of sale by *Chemurgic Agricultural Chemicals, Inc.* and is accepted as such by the Buyer.



Chemurgic Agricultural Chemicals, Inc.

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