

# STOLLER® KEYLATE® Manganese

Specimen Label

**5% MANGANESE**

F1601



**KEYLATE®**



**Z- KEYMN**  
**US Patent: 5,997,600**

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## GUARANTEED ANALYSIS

Manganese (Mn) 5%  
5% Chelated Manganese

(Derived from manganese oxide, chelated with ethanol, 2-amino-2-hydroxy-1,2,3-propanetricarboxylate)

Net Weight: 10 lb./ gallon (1.2 Kg/ liter) chelated with

## GENERAL INFORMATION

**KEYLATE Manganese** is formulated to be used in fertilizer solutions. Broadcast or row applications are acceptable, although greater efficiency may be expected from row applications. Micronutrient deficiencies usually occur when plants are small; therefore, micronutrients should be added to the fertilizer at or before planting.

## STORAGE INSTRUCTIONS

**Keylate Micronutrients** are chelates with low corrosivity. It is recommended that keylates (9% Zn, 5% Fe, 5% Mn, 5% Cu) be stored in fiberglass, polyethylene or polyolefin. We recommend storing pails a maximum of three pails high. Do not stack pallets.

## CAUTION: KEEP OUT OF REACH OF CHILDREN

**WARNING:** Harmful if swallowed. Avoid breathing spray mist. May cause irritation of nose, throat and/ or skin. Avoid contact with eyes, skin and clothing. **If swallowed:** Induce vomiting by sticking finger down throat. Never give anything to an unconscious person. Get medical attention. **If in eyes:** Wash eyes with plenty of clear water for at least 15 minutes. Get medical attention.

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

**CONDITIONS OF SALE:** 1. Seller warrants that this product consists of the ingredients specified and is reasonably fit for the purpose stated on this label when used in accordance with directions under normal conditions of use. No one, other than the officers of Seller, is authorized to make any warranty, guarantee or direction concerning this product. 2. Because the time, place, rate of application and other conditions of use are beyond Seller's control, Seller's liability from handling, storage and use of this product limited to replacement of product or refund of purchase price.

## APPLICATION INSTRUCTIONS

### FOR SOIL APPLICATION

**KEYLATE Manganese** can be incorporated in liquid fertilizer or applied separately. Apply the following rates if you do not have a soil or leaf analysis.

**Maintenance application:** 1 quart per acre.

**Moderate Micronutrient Deficiency:** 2 to 3 quarts per acre.

**Heavy Micronutrient Deficiency:** 4 to 5 quarts per acre.

If you have a soil or leaf analysis recommendation, apply **KEYLATE Manganese** at the following rates:

Elemental copper required by soil/ leaf test	Quarts of <b>KEYLATE Manganese</b>	Pounds of <b>KEYLATE Manganese</b>
1 lb	0.75	1.875
2 lb	1.96	3.750
3 lb	2.25	6.0
4 lb	3.00	8.0
5 lb	3.75	10.0
6 lb	4.50	12.0
7 lb	5.25	14.0
8 lb	6.00	16.0
9 lb	6.75	18.0
10 lb	7.50	20.0

### FOR FOLIAR SPRAY APPLICATION

**Vegetables:** Apply 0.5 quart per acre (1.2 liters per hectare) each spray.

**KEYLATE Manganese** can be incorporated in the normal spray program.

**Field Crops:** Apply 1 quart per acre (2.3 liters per hectare) when plants are young. This is the time when most severe deficiencies occur.

*\* Do not exceed one quart per acre for foliar sprays per application on above crops.*

**Tree Crops:** Apply 4 quarts of **KEYLATE Manganese** in 500 gallons of dilute spray (10 ltr. in 2000 ltr.). If concentrated spray is used, increase the concentration in direct proportion to dilution. If tree crops are sprayed several times a year, the above amount can be split into more numerous applications. Split applications over the year are considered more beneficial than single applications.

**KEYLATE Manganese** will disperse in water with little agitation. Many pesticides can be added and applied while spraying **KEYLATE Manganese**.

Follow this mixing sequence: 1. Water 2. **KEYLATE Manganese** 3. Pesticide

When foliar spraying **KEYLATE Manganese** through a conventional sprayer, use a minimum of 20 gallons of water per acre (180 liters per hectare). When foliar spraying **KEYLATE Manganese** with low volume equipment, 5 gallons of water per acre (45 liters per hectare) is usually sufficient. If less water is used, slight burning of the foliage may occur. A maximum of 0.5 gallons per acre per application is recommended. Aerial applications should not exceed 1 quart per gallon (1 liter per 4 liters) of water. For best results, spray when the crop is in an active growing state, after irrigation or rainfall. Spray early in the morning or late afternoon. The addition of 0.5% ( total solution) of nitrogen solution, ammonium sulfate, or L.B. Urea may aid leaf absorption.