

# ELE-MAX

PRECISION NUTRITION

## ManZinc FL

### 1-0-0

Foliar Nutritional Liquid Flowable

A formulated product for the treatment of manganese and zinc deficiencies by foliar application.

#### GUARANTEED ANALYSIS

|                          |        |
|--------------------------|--------|
| Total Nitrogen (N) ..... | 1.00%  |
| 1.00% Urea Nitrogen      |        |
| Manganese (Mn) .....     | 14.00% |
| Zinc (Zn) .....          | 19.50% |

Derived from urea, manganese carbonate and zinc oxide.

Nutrient content per gallon: 2 lb. 1 oz. Manganese (Mn), 2 lb. 14 oz. Zinc (Zn)

KEEP OUT OF REACH OF CHILDREN

#### WARNING

May be harmful if swallowed  
 May be harmful in contact with skin Causes eye irritation  
 Causes mild skin irritation  
 May be harmful if inhaled  
 Toxic to aquatic life with long lasting effects



WT.PER GAL.: 14.83 lbs (6.73 kg)

YSN 052115/0815

NET CONTENTS: □ 2.5 gals (9.46 L)

□ 250 gals (946.35 L)

Information about the components of this lot of fertilizer may be obtained by writing to Helena Chemical Company, 225 Schilling Boulevard, Suite 300, Collierville, TN 38017 and giving the lot number which is found on the container.

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

Contents Made In Great Britain

F224

MANUFACTURED FOR  
 HELENA CHEMICAL COMPANY  
 225 SCHILLING BOULEVARD, SUITE 300  
 COLLIERVILLE, TN 38017  
 901-761-0050

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

BEFORE USING THIS PRODUCT, READ ALL PRECAUTIONS, DIRECTIONS FOR USE, CONDITIONS OF SALE-LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES.

May be harmful if swallowed. May be harmful in contact with skin. Causes eye irritation. Causes mild skin irritation. May be harmful if inhaled. Toxic to aquatic life with long lasting effects. Keep product locked up and out of the reach of children. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or smoking tobacco. Remove and wash contaminated clothing before reuse. Do not take internally. Avoid contact with or inhalation of spray application mist if present. Do not apply this product in such a manner as to directly expose workers or other persons. If product is being mixed with pesticides and/or spray adjuvants, follow all precautionary statements on the accompanying product(s) labeling. Not for human or animal consumption.

Personal Protective Equipment (PPE): Wear protective eyewear (goggles or face shield), chemical-resistant gloves, long-sleeved shirt and long pants, and shoes plus socks when using this product. Take off any contaminated clothing and wash before reuse.

**Disclaimer:** Always refer to the label on the product before using Helena or any other product.

| FIRST AID           |  |
|---------------------|--|
| IF IN EYES:         | <ul style="list-style-type: none"> <li>Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>   |
| IF SWALLOWED:       | <ul style="list-style-type: none"> <li>Call a POISON CENTER or doctor immediately.</li> <li>Rinse mouth. Do NOT induce vomiting.</li> <li>Do not give anything by mouth to an unconscious person.</li> <li>Immediately call a POISON CENTER or doctor.</li> </ul>  |
| IF INHALED:         | <ul style="list-style-type: none"> <li>Move person to fresh air and keep at rest in a position comfortable for breathing if they feel unwell.</li> <li>If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a POISON CENTER or doctor for treatment advice.</li> </ul> |
| IF ON SKIN OR HAIR: | <ul style="list-style-type: none"> <li>Take off immediately all contaminated clothing. Rinse skin with water or shower.</li> <li>Get medical attention if irritation develops or persists.</li> <li>Wash contaminated clothing before reuse.</li> </ul>  |

**HOT LINE NUMBER:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

#### STORAGE AND DISPOSAL

Store in a cool, dry chemical store, out of reach of children and livestock. Protect from frost. Keep container tightly closed, do not allow water to be introduced to the contents of this container. Store at temperatures above 32°F. Do not contaminate water sources by cleaning of equipment or disposal of spray waste. Dispose of empty containers by triple rinsing with detergent solution or puncture and discard empty containers in a landfill in accordance with current local, State and Federal regulations.

#### GENERAL INFORMATION

ManZinc FL is a formulated treatment for manganese and zinc deficiencies in a wide range of crops. This product is recommended for use as a supplement to a well-balanced fertilizer program only. This product may be applied using a variety of agricultural application equipment and techniques. It is not intended nor implied to be a substitute for sound soil fertilization and good conventional cultural practices. Thorough coverage of foliage is necessary for best results.

For additional information on product or programs, or if you are unfamiliar with any of the application methods, contact your local Helena representative or authorized Helena dealer.

Avoid application under extremes of climate, e.g., rapid drying conditions, extremely slow drying conditions, frost, rain, or when frost or rain are anticipated.

#### DIRECTIONS FOR USE

Shake the container thoroughly before use.

#### FERTILIZER IMPREGNATION

May be coated onto dry fertilizer granules.

**WARNING:** This product must not be used with straight ammonium nitrate fertilizer, or any other fertilizer product classified as an oxidizing agent – Class 5.1 material. For further advice, please consult your Helena representative.

**Ground Applications:** This product may be applied by conventional ground rig in volumes ranging from full dilute to concentrate.

#### FOLIAR DOSE RATE AND TIMINGS

**Alfalfa:** 1 to 2 pints/acre when sufficient cover to intercept spray, and also at flower bud formation. Water rate: 3 to 20 gallons/acre.

**Apples:** 1 pint to 1 quart/acre applied at bud burst and/or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

**Apricots:** 1 pint to 1 quart/acre applied at winter bud or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

**Beans:** Apply 1 pint/acre at 4- to 6-leaf stage. Repeat if necessary 10 to 14 days later. Water rate: 20 gallons/acre.

**Broccoli:** 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

**Brussels Sprouts:** 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

**Cabbage:** 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

**Calabrese:** 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

**Canola:** 2 pints/acre at the 4- to 6-leaf stage. Water rate: 3 to 20 gallons/acre.

**Cauliflower:** 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

**Cereals:** 1 pint to 1 quart/acre from 3 leaf stage to first node detectable (Zadok's G.S. 13 to 31). Water rate: 20 gallons/acre.

**Cherries:** 1 pint to 1 quart/acre applied at winter bud or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

Citrus: 1 pint to 2 quarts/acre pre-bloom and during autumn flush. Water rate: 50 to 300 gallons/acre.

Cole Crops: 1 pint to 1 quart/acre at the 4- to 6-leaf stage. Water rate: 20 gallons/acre.

Corn: 1 to 2 pints/acre at 4- to 8-leaf stage. For moderate to severe deficiency, repeat applications at 10- to 14-day intervals. Water rate: 3 to 20 gallons/acre.

Courgettes (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

Cucumber (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

Cucurbits (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

Melons (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

Nectarines: 1 pint to 1 quart/acre applied at winter bud or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

Nursery/Ornamentals: 5 pints in 100 gallons water (0.625% v/v) as soon as there is sufficient leaf area to intercept a spray. Repeat at 10- to 14-day intervals as necessary. Avoid applications during flowering. Spray a maximum of three applications per crop per annum. Note: Do not apply within one month of picking/marketing. Maximum water rate: 20 gallons/acre.

Nuts (Deciduous): 1 pint/acre at bud break in spring. Repeat if necessary 15 days later. Water rate: 50 to 100 gallons/acre.

Peaches: 1 pint to 1 quart/acre applied at winter bud or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

Pears: 1 pint to 1 quart/acre applied at bud burst and/or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

Peas: Apply 1 pint/acre at 4- to 6-leaf stage. Repeat if necessary 10 to 14 days later. Water rate: 20 gallons/acre.

Plums: 1 pint to 1 quart/acre applied at winter bud or after harvest before leaf senescence. Water rate: 50 to 100 gallons/acre.

Potatoes: 1 to 2 pints/acre at one week after 100% emergence and following petiole analysis during tuber bulking. For moderate to severe deficiency, repeat applications at 10- to 14-day intervals. Water rate: 3 to 25 gallons/acre.

Rice: 1 to 2 pints/acre at the start of tillering. Water rate: 3 to 20 gallons/acre.

Soybeans: Apply 1 pint/acre at 4- to 6-leaf stage. Repeat if necessary 10 to 14 days later. Water rate: 20 gallons/acre.

Squash (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

Strawberries (Field Grown): 1 pint to 1 quart/acre at spring regrowth and also at green bud. Water rate: 20 gallons/acre.

Sugar Beet: 1-½ quarts/acre at 4- to 6-leaf stage and again in July/August (6 weeks before harvest). Water rate: 20 gallons/acre.

Tomatoes (Field Grown): 1 to 2 pints/acre at the 4- to 6-leaf stage and repeated at 10- to 14-day intervals if required. Water rate: 3 to 150 gallons/acre.

Turf: 0.4 fl. oz./1,000 sq. ft. as soon as growth commences in spring. Repeat sprays at 10- to 14-day intervals as necessary. Water rate: 0.5 gallon/1,000 sq. ft.

**DO NOT APPLY NEAR WATER, STORM DRAINS, OR DRAINAGE DITCHES. DO NOT APPLY IF HEAVY RAIN IS EXPECTED. APPLY THIS PRODUCT ONLY TO YOUR LAWN/GARDEN.**

Vines: 1 to 2 pints/acre applied at flower buds visible and again at flower buds separated or at fruit set. Water rate: 20 to 150 gallons/acre.

Watermelons (Field Grown): 1 pint/acre applied from the 4- to 6-leaf stage onwards. Repeat applications may be necessary for moderate to severe deficiency with a 10- to 14-day interval. Water rate: 5 to 20 gallons/acre.

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#### TANK MIXING/CO-APPLICATION

Read ALL labels carefully and adhere strictly to the instructions for use and advice regarding whether or not product(s) should be co-applied. Many variables can influence the performance of co-applied products and therefore co-application is entirely at the risk of the end-user. It is strongly recommended that a limited application is made initially when using unfamiliar product mixes. Before co-application of products you, or your advisor, must visit [www.tankmix.com/elemax](http://www.tankmix.com/elemax) for important information or do a jar test.

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#### CONDITIONS OF SALE—LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale—Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

This label is believed to be reliable and must be followed carefully. Injury to the crop to which the product is applied may result from the occurrence of extraordinary or

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unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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