

# Citraplex® 20% Manganese

For the prevention and correction of Manganese deficiencies in crops

## GUARANTEED ANALYSIS

Manganese (Mn) .....20%

20% Chelated Manganese (Mn)

Derived From: Manganese Sulfate, chelated with Citric Acid

Contains: 0.20 lb. of Mn per 1.0 lb. of material

## GENERAL INFORMATION

**CITRAPLEX 20% MANGANESE** is a non-phytotoxic, citric acid based micronutrient for foliar and soil application.

The metal is highly available and absorbed through leaves or root systems. Use stainless steel or acid resistant plastic or fiberglass for mixing equipment.

## GENERAL RECOMMENDATIONS

**COMPATIBILITY:** CITRAPLEX 20% MANGANESE is generally compatible with most chemicals used in crop protection. It may be incorporated into existing spray programs. Add micronutrient to water before adding other ingredients. It is always advisable to test for compatibility on a small scale (quart jar) before full scale mixing.

**FOLIAR APPLICATIONS:** For best absorption into the plant, apply this product in the morning or late evening. For aerial application, use at least 1 gallon of water for every pound of product. This will supply adequate volume for proper distribution. Activator 90 is the preferred adjuvant to use with CITRAPLEX 20% MANGANESE. Consult local extension agent for sensitive crops.

**SOIL APPLICATIONS:** CITRAPLEX 20% MANGANESE may be applied to any soil.

## APPLICATION RECOMMENDATIONS

**CITRAPLEX 20% MANGANESE** is recommended for application to the following crops:

Alfalfa	Celery	Lettuce	Peanuts	Sorghum
Almonds	Cherries	Melons	Pecans	Soybeans
Apples	Citrus	Milo	Peppers	Spinach
Apricots	Corn	Mint	Plums	Strawberries
Asparagus	Cotton	Nectarines	Pomegranates	Sugar Beets
Avocado	Cranberries	Nursery Stock	Potatoes	Sugar Cane
Barley	Cucumbers	Oats	Pasture &...	Sweet Corn
Beans (all)	Figs	Olives	... Range grass	Tomatoes
Boysenberries	Garlic	Onions	Prunes	Turf Grass
Broccoli	Grapes	Peaches	Rape	Walnuts
Brussel Sprouts	Grass	Pears	Rice	Watermelons
Carrots	Hops	Peas	Safflower	Wheat

Unless stated differently on crops below, apply 1 to 2 lbs. per acre for foliar, or 2 to 4 lbs. per acre for soil application within 3 weeks after emergence. Split applications are preferred over a single application. Timing and rates for split applications are 1 to 1-1/2 lbs. foliar or 2 to 3 lbs. soil applied (banded) within 3 weeks after emergence, and repeat application before bloom.

## FRUIT AND NUT CROPS

**ALMONDS:** Soil: In early spring, apply 3 to 10 lbs. per acre, with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover sprays at 1 to 2 lbs. per acre.

**APPLES AND PEARS:** Soil: In early spring, apply 3 to 10 lbs. per acre, with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover sprays at 1 to 2 lbs. per acre.

**APRICOTS, NECTARINES, PEACHES, PLUMS AND PRUNES:** Soil: In early spring, apply 3 to 10 lbs. per acre, with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover sprays at 1 to 2 lbs. per acre. **CAUTION:** Do not apply more than 2 lbs. per acre to plums or sensitive varieties with cover sprays.

**CHERRIES:** Soil: In early spring, apply 3 to 10 lbs. per acre, with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover sprays at 1 to 1-1/2 lbs. per acre.

**CITRUS:** Soil: In early spring, apply 3 to 10 lbs. per acre, with pesticide, irrigation water or fertilizer. Foliage: Mix 3 to 5 lbs. per acre with sufficient water and apply during spring and fall growth flush. Repeat during growing season at 1 to 2 lbs. per acre, with pesticide cover sprays.

**GRAPES:** Apply 2 to 4 lbs. per acre before bloom as foliage or soil application. Add 1/2 to 1 lb. per acre to each pesticide spray. For best results apply 1-1/2 lbs. per acre near bud swell and another 1-1/2 lbs. per acre when shoots are 4 to 6 inches long.

**PECANS:** Soil: In early spring, apply 3 to 10 lbs. per acre with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover spray at 1 to 2 lbs. per acre.

**OTHER FRUIT AND NUT CROPS:** Soil: In early spring, apply 3 to 10 lbs. per acre with pesticide, irrigation water or fertilizer. Foliage: Mix 2 to 3 lbs. per acre with sufficient water and apply as a thorough cover spray. Repeat at petal fall and cover sprays at 1 to 2 lbs. per acre.

## FIELD AND VEGETABLE CROPS

**BEANS:** Soil: Apply 3 to 6 lbs. per acre with irrigation water, pesticides, or fertilizer before the 4th trifoliolate. Foliage: Apply 1 to 2 lbs. per acre to foliage with sufficient water when beans are between the 2nd and 4th trifoliolate stage. Apply 1 to 1-1/2 lbs. per acre with normal pesticide spray programs.

**CORN:** Apply 1 to 2 lbs. per acre to the foliage or soil. For best results, split the application as follows: Apply 1 to 1-1/2 lbs. per acre to the foliage or soil (band) within 3 weeks of emergence. Apply 1/2 to 1 lb. per acre with each pesticide application prior to bloom.

**COTTON:** Apply 1 to 2 lbs. per acre to the foliage or soil. For best results, split the application as follows: Apply 1 to 1-1/2 lbs. per acre to the foliage or soil (band) within 3 weeks of emergence. Apply 1/2 to 1 lb. per acre with each pesticide application prior to bloom. Early applications are preferable.

**OKRA:** Apply 1 to 2 lbs. per acre to the foliage or soil. For best results, split the application as follows: Apply 1 to 1-1/2 lbs. per acre to the foliage or soil (band) within 3 weeks of emergence. Apply 1/2 to 1 lb. per acre with each pesticide application prior to bloom. Early applications are preferable.

**POTATOES:** Soil: Apply 1 to 2 lbs. per acre at or near planting. Foliage: In early spring, apply 1 to 1-1/2 lbs. per acre with sufficient water to give complete coverage. Repeat application within 2 to 4 weeks especially where deficiency is known to occur.

**RICE:** Foliage: Apply 2 to 4 lbs. per acre in sufficient water to assure thorough coverage. For best results, apply 1 to 1-1/2 lbs. with first pesticide application and 1 to 1-1/2 lbs. per acre prior to pollination.

**SMALL GRAINS:** Soil: Band, sidedress or broadcast 1 to 4 lbs. per acre at planting or within 2 weeks after emergence or when deficiency symptoms first appear. Foliage: Apply 1 lb. per acre in sufficient water for thorough coverage. Apply within 30 days after planting and before flowering. Split applications are preferred over a single application.

**SORGHUM:** Apply 1 to 2 lbs. per acre to the foliage or soil. For best results, split the application as follows: Apply 1 to 1-1/2 lbs. per acre to the foliage or soil (band) within 3 weeks of emergence. Apply 1/2 to 1 lb. per acre with each pesticide application prior to bloom. Early applications are preferable.

**OTHER FIELD AND VEGETABLE CROPS:** Apply 1 to 2 lbs. per acre to the foliage or soil. For best results, split the application as follows: Apply 1 to 1-1/2 lbs. per acre to the foliage or soil (band) within 3 weeks of emergence. Apply 1/2 to 1 lb. per acre with each pesticide application prior to first bloom or subsequent blooms.

## TURF AND ORNAMENTALS

Apply to the foliage at 1 to 2 lbs. per acre in no less than 50 gallons of water. Use a non-ionic surfactant such as Activator 90 to insure uniform coverage. Apply through drip irrigation systems at 1 to 2 lbs. per acre. Do not apply to sensitive ornamentals. If no previous experience prevails, a small test must be conducted prior to application.

## FIRST AID

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If on Skin:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.regulatory-info-lpi.com/>

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

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Guaranteed by:  
**LOVELAND PRODUCTS, INC.**  
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**NET WEIGHT: 25 POUNDS (11.35 Kg)**