



# MAGNESIUM CHELATE 3%

## GLUCOHEPTONATE ORGANIC CHELATE

- **ASSISTS IN CHLOROPHYLL PRODUCTION**
- **FOR FOLIAR AND ROOT APPLICATION**

### GUARANTEED ANALYSIS:

Magnesium (Mg) ..... 3%  
 3% Chelated Magnesium (Mg)  
 Derived From: Magnesium sulfate.  
 Chelating Agent: Glucoheptonate.  
 Weight per gallon ..... 9.61 lbs.  
 Weight per liter ..... 1.12 kg  
 pH ..... 6.5  
 Each gallon contains ..... 0.28 lbs Mg  
 Each liter contains ..... 0.033 kg Mg

### PRODUCT DESCRIPTION:

Magnesium Chelate 3% is an organic chelate that provides magnesium in a soluble form, making it readily available for both soil and foliar application. Magnesium Chelate 3% is environmentally sound, and is made from organic sugars that are easily absorbed intact along with the chelated metal and utilized in the plant cell. Magnesium Chelate 3% is available for microbial activity in the soil. This type of chelate is especially efficient in high pH soils, or calcareous soils and is recommended over EDTA chelates. Magnesium Chelate 3% is a near neutral pH of 6.5 and is ideal for mixing with pH acid sensitive products. It is not affected by soil conditions, other nutrients or technical grade materials. Magnesium Chelate 3% will remain in a soluble form for plant uptake since it remains a double ++ charge ion and is not attracted to negatively charged soil particles. Magnesium Chelate 3% is compatible with all Growth Products professional fertilizers. Be sure to read all mix instructions prior to tank mix solutions.

### MAGNESIUM DEFICIENCIES:

Magnesium is a very important secondary nutrient. It is part of the chlorophyll molecule, and is necessary for sugar formation. Inadequate amounts of magnesium will first appear as a general loss of green color at bottoms of older leaves (interveinal chlorosis). Continued deficiency will also affect younger leaves, followed by formation of lesions. Magnesium deficiencies occur mostly in sandy soils and in extremely high pH soils. High levels of calcium and potassium will also reduce magnesium uptake.

**Turf Applications:** Soil testing is necessary to determine magnesium levels. Where magnesium levels are deficient or marginal, apply Magnesium Chelate 3% throughout the growing season. This can be added to any fertilizer spray solution.

**Trees, Ornamentals & Palms:** Magnesium Chelate 3% can be used as a soil or foliar spray to correct Magnesium deficiencies. Dilute 24-36 oz. in 100 gallons of water. Spray leaf surface until covered.

**CAUTION:** Keep out of reach of children. In case of contact with eyes, flush immediately with copious amounts of water. Contact a physician. Do not take internally.

- **FOR TURF AND ORNAMENTALS**
- **NATURAL ORGANIC CHELATING AGENT**

### STORAGE & HANDLING:

**Mixing:** Magnesium Chelate 3% is NOT compatible with phosphate fertilizers, and must be mixed and applied separately.

Foliar Turf Applications		
Application	Rate / 1,000 FT <sup>2</sup> (100 m <sup>2</sup> )	Frequency
All Types of Cool Season and Warm Season Grasses	2 - 6 oz. (127 - 159 ml)	Apply 3 to 5 times during growing season or as needed to maintain color
Bermudagrass	4 - 8 oz. (159-177 ml)	

Magnesium Per Liquid Ounce (ml)	
Apply at desired magnesium rate per 1,000 FT <sup>2</sup> (100 m <sup>2</sup> )	
Magnesium Chelate 3%	Magnesium Rate
44 oz 1.2 L	1/10 lb. Mg 40g Mg
55 oz 1.5 L	1/8 lb. Mg 50g Mg
1 gal 3 L	1/4 lb. Mg 100g Mg

Palm Program		
<b>Transplant Fertilization</b>	1 quart in 100 gallons of water (250 L in 100 L water)	Drench root ball and soil at time of planting
<b>Established Palms Soil Drench</b>	2 - 3 ounces per gallon of water. Thoroughly drench soil around area (250 ml per 100 L water)	Applied 2 times per year or as required.
<b>Established Palms Soil Injection</b>	1 quart in 100 gallons of water (250 ml in 100 L water)	Inject 1 ft from trunk and out to drip line every 2 - 3 foot in grid pattern. Inject 1/2 gal per hole at 6 - 8 " deep.
<b>Foliar Spray</b>	1 quart per 100 gal of water (250 ml 100 L water)	Thoroughly spray to point of run-off. Apply every 4 weeks or as needed.

Manufactured By:

