



MICREL TOTAL (5-0-0)

With **EIGHT CHELATED MICRONUTRIENTS**

- **100% Chelated Micronutrients**
- **Foliar Spray to Correct Chlorosis**
- **Complete Micro Profile**

GUARANTEED ANALYSIS:

Total Nitrogen (N)5%
5% Urea Nitrogen	
Magnesium (Mg)0.5%
0.5% Chelated Magnesium (Mg)	
Sulfur (S)4%
4% Combined Sulphur (S)	
Boron (B)0.02%
Copper (Cu)0.5%
0.5% Chelated Copper (Cu)	
Iron (Fe)6%
6% Chelated Iron (Fe)	
Manganese (Mn)0.5%
0.5% Chelated Manganese (Mn)	
Molybdenum (Mo)0.0005%
Zinc (Zn)0.5%
0.5% Chelated Zinc (Zn)	
Derived From: Low Biuret Urea, Iron Citric Acid, Manganese Citric Acid, Copper Citric Acid, Zinc Citric Acid, Magnesium Citric Acid, Sodium Borate, Sodium Molybdate, Boric Acid. Chelating Agent: Citric Acid.	
Weight per gallon	11.65 lbs.
pH	2

PRODUCT DESCRIPTION:

Micrel Total is a fully chelated 100% micronutrient package. Micrel Total has a horticulturally correct ratio of magnesium, sulfur, boron, copper, iron, manganese, molybdenum and zinc. The chelation process assures you of completely soluble and available micros that the plant can immediately absorb. Micrel Total can be used to correct deficiencies in all types of greenhouse and nursery crops. It is an ideal product to use when it is not possible to run soil and tissue tests to determine the exact deficiency. Micrel Total is also a great additive to supplement fertilizers lacking micronutrients. Micrel Total can be foliar applied for immediate treatment of chlorotic conditions and is more efficient than non-chelated products.

APPLICATION RECOMMENDATIONS:

Micrel Total needs no mixing and will not settle out of solution. Like all Growth Products, it is ideal for any type of fertigation system, drip irrigation or spray equipment. Use Micrel Total on all types of bedding plants, perennials, cut flowers, plugs, ornamentals, nursery crops, trees, foliage and container plants.

Direct Siphon: Micrel Total can be siphoned directly from the original container. This can be done with a variable proportioner that

- **Effective As Foliar Spray or Soil Drench**
- **Soluble and Ready For Uptake**

100 PPM NITROGEN SOLUTION Contains the Following Elemental ppm	
PPM Nitrogen	100
Iron (Fe)	120
Sulfur (S)	80
Magnesium (Mg)	10
Manganese (Mn)	10
Copper (Cu)	10
Zinc (Zn)	10
Boron (B)	0.40
Molybdenum (Mo)	0.01

Micrel Total 5-0-0				
Fluid Ounces of Micrel Total per Gallon of Stock Tank Water				
PPM Nitrogen	25	50	75	100
PPM Iron	30	60	90	120
PPM Mg, Cu, Mn, Zn	3	5	8	10
1:500	23	46	70	93
1:300	14	28	42	56
1:200	9	18	28	37
1:100	5	9	14	19
1:50	2	5	7	9
1:15 Ratio for Hozon Proportioner				
1:15	0.70	1.39	2.09	2.78

Correction of Micronutrients Deficiencies & Maintenance of Micronutrient Levels

Plant Type:	Application Rate:
All types of greenhouse crops, plugs, annuals, hanging baskets, perennials, vegetables	Foliar Spray: 1 - 2 quarts per 100 gallons of water (250-500 ml in 100 liters water)
	Drip Irrigation & Overhead Irrigation: Set injector to 50 PPM of Nitrogen (67 ml per L water at 1:100 ratio)

** Add color, produce chlorophyll and pick up plant quality

can be set to high ratios. This eliminates the need to mix stock concentrates or stir the mixing barrels. For 100 PPM nitrogen, set injector to 1:700; for 200 PPM, set injector to 1:350.

Soil & Tissue Testing: Have horticulturalists accurately identify micronutrient deficiencies. Whenever possible, run these tests prior to micronutrients applications in order to prescribe the deficient micro.

Crop Programs	
Plant / Crop:	Application Rate per Acre
Berries	Use 1-2 quarts per acre. Thoroughly wet leaves to run off. (2 - 5 liters per hectare)
Citrus Trees:	Use 1-2 quarts per acre. Thoroughly wet leaves to run off. (2 - 5 liters per hectare)
Fertigation:	Apply 1 - 2 quarts per acre via drip tape or low volume irrigation. (2 - 5 liters per hectare)
Foliar Spray: Tomatoes, Small Fruit, Grapes and Other Vegetables	Use 1-2 quarts in a minimum of 50 gallons of water with ground spray equipment. Apply at least 6 times per season to correct minor nutrient deficiencies. Wet leaves to run off. (2- 5 L per 200 L water)
Greenhouse & Shadehouse:	Apply 1 - 2 quarts per 100 gal water as a foliar spray. Repeat every 1 - 2 months or as needed. (250 - 500 ml per 100 liters water)
Liners and Plugs:	Apply 8 oz - 1 qt per 100 gallons water as foliar spray (63 - 250 ml per 100 liters water)
Nut Trees	Use 1-2 quarts per acre. Thoroughly wet leaves to run off. (2 - 5 liters per hectare)
Tropical Fruits	Use 1-2 quarts per acre. Thoroughly wet leaves to run off. (2 - 5 liters per hectare)

Nursery Applications		
Application	Rate	Notes
Containerized and Field Grown Crops, (including but not limited to): Deciduous and Evergreen Trees, Foliage, Ornamental Grasses, Perennials, Tropicals, Woody Ornamentals	Foliar Spray: 1-2 quarts per 100 gal of water (250-500 ml in 100 liters water) Rate Per Gallon: 1¼ - 2½ oz per gal water or 2½ - 5 tbs. per gal water	Thoroughly spray to point of run-off. Apply every 2-4 weeks.

Landscape Plantings	
Foliar Spray:	1 - 2 quarts in 100 gallons of water (500 ml - 1 liter in 100 liters water) Rate Per Gallon:
Soil Drench:	2 - 5 ounces per gallon of water. Thoroughly drench soil around area (16 - 39 ml in 1 liter water))

Parts Per Million: Use the Parts Per Million chart to choose desired nitrogen and iron ratio.

Foliar Feeding: When using overhead irrigation, Micrel Total gives you dual efficiency since the nutrients will be absorbed by both the leaves and roots. For tender plants and greenhouse foliar spray applications use one-half the rate (PPM) you would normally use for drip irrigation feeding. Foliar feeding should not be done when plants are in bloom.

Hand Watering: Mix ¾ to 1 teaspoon Micrel Total per gallon of water. Saturate soil with mix.

Foliar Feeding: Apply this product through overhead, microjet, cen-

ter pivot sprinkler irrigation. Micrel Total gives you dual efficiency since the nutrients will be quickly absorbed by both the leaves and roots. See ppm chart for rates. For tender plants and greenhouse foliar spray applications use one-half the rate (PPM) you would normally use for drip irrigation feeding. For Hand spray use 1¼ oz to 2½ oz per gallon of water Spray to full coverage.

STORAGE & HANDLING:

Storage: All Growth Products horticultural micronutrients can be stored in normal warehouse areas and are not affected by freezing temperatures. Micrel Total has is a citric acid chelate and has an acid pH. Always store in original container and keep sealed.

Mixing: Micrel Total is compatible with other technical chemicals including fungicides and can be mixed and sprayed in one application. Do not mix with highly alkaline materials.

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.

Condition of Sale and Warranty: Growth Products, Ltd. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. Handling, storage and use of the product by Buyer or User are beyond the control of Growth Products, Ltd. and Seller. Risks such as crop injury or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property, or failure to follow label directions will be assumed by Buyer or User. IN NO CASE WILL GROWTH PRODUCTS, LTD. OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

Manufactured in the USA by:

