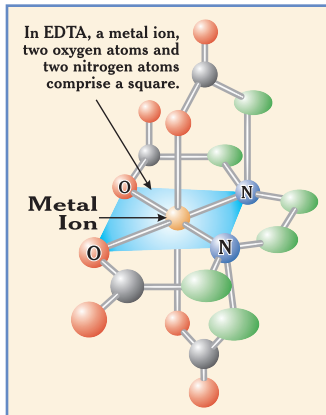


# Micronutrient Blends

**Foliar MicroBlend:** 10-4-3 with chelated micronutrients. This is a new product from Nutra-Flo. It contains N, P & K along with boron, copper, iron, manganese and zinc. The nitrogen is from urea for fast absorption into the leaf tissue. The phosphorus is from 100% orthophosphoric acid and potassium hydroxide provides the potassium. It's intended for foliar applications in all types of crops. It's intended to be used alone, but it may be blended with other NPK fertilizers, including those made from 100% orthophosphate.

**Corn Mix:** Contains EDTA Chelated copper, manganese and zinc.

**Soybean Mix:** Contains EDTA Chelated manganese, magnesium, iron and zinc.



## Why use a chelated micronutrient?

The word “chelate” is Latin for claw. The “claw like” molecular structure in EDTA and HEDTA chelates protects positively charged cations such as zinc, manganese, magnesium, calcium, copper and iron from ‘tie-up’ in the soil. Chelates convert the positively-charged cations to negatively-charged molecules. The soil is negatively charged and repels the negatively-charged chelate molecule, thus keeping the micronutrient available to plants. This allows easier uptake by micronutrient hungry plants.

EDTA and HEDTA chelates utilize the strongest and most effective chelating agents used in agriculture today. The PureGrade line of chelated micronutrients have the highest efficiency, which means growers can use less product per acre to achieve the same results as compared to non-chelated nutrients.

## Individual Micronutrients

**Boron<sup>1</sup>:** 10% (not chelated) Involved in the formation of cell walls, terminal buds and pollen tubes. Participates in regulation of starch production and translocation of sugars and starches.

**Calcium:** 3% EDTA Chelated. Improves fruit and nut formation. Improves postharvest quality of fruits and vegetables. Aids in the control of certain fungal and bacterial diseases.

**Copper:** 7.5% EDTA Chelated. Involved in several enzyme systems, cell wall formation, electron transport and oxidation reactions.

**Magnesium:** 2.5% EDTA Chelated. A constituent of plant chlorophyll—important in photosynthesis.

**Manganese:** 6% EDTA Chelated. Improves germination and hastens maturity. Helps resist root and foliar diseases caused by fungi.

**Molybdenum<sup>1</sup>:** 5% sodium molybdate (not chelated). Utilized by specific plant enzymes to participate in reduction and oxidative reactions.

**Zinc:** 6% EDTA Chelated. Aids plant growth and enzyme systems. Essential for promoting metabolic reaction. Necessary for promoting chlorophyll and forming carbohydrates.

**RGS (Root Growth Stimulator):** 7% Zn as ammonium zinc acetate. May be blended with most types of liquid fertilizers including NPK starters, anhydrous ammonia and impregnated into dry granular fertilizers.

<sup>1</sup>Only micronutrients that have a positive charge may be chelated. Those with a negative charge like molybdenum and boron are not chelated.

## Why add micronutrients?

- Original soil parent material may have been low in one or more micronutrients
- Many years of farming have depleted readily available forms of micronutrients
- Today's high yields remove more nutrients than ever from the soil
- Excessive quantities of some nutrients create deficiencies, or “fix” micronutrients into unavailable forms
- Many crops experience “transient” deficiencies during certain growth stages such as flowering and seed fill.
- Stressful growing conditions such as low temperatures and saturated soil can reduce root growth rendering micronutrients temporarily unavailable.
- Soil pH, when too high or too low, may limit micronutrient availability.
- Micronutrient deficiencies can be detected by soil testing. Applying micronutrients with starter fertilizer at planting time will prevent early-season crop deficiencies.

## Why Use PureGrade Chelated Micronutrients?

### Foliar applications

- Compatible with most herbicides
- Compatible with NPK foliar fertilizers, including 100% orthophosphate grades.

### Liquid starter banded at planting time

- Compatible with insecticides
- Compatible with all types of liquid starter fertilizers including 100% orthophosphates
- Chelated micronutrients remain mobile in the soil easily available to developing root systems

### Fertigation

- PureGrade Chelated Micronutrients can be easily added to irrigation systems for quick treatment of nutrient deficiencies
- Get fast response from both, root and foliar uptake
- Combine with NPK foliar fertilizers for a complete nutrient program

GUARANTEED ANALYSIS		
EDTA CORN MIX	EDTA SOYBEAN MIX	FOLIAR MICROBLEND
4.5% Zinc 0.5% Copper 0.5% Manganese	2.25% Manganese 1.25% Zinc 0.65% Magnesium 0.5% Iron	10.0% Nitrogen 4.0% Phosphate 3.0% Potash 0.10% Boron
0.10% Copper 0.25% Iron 0.20% Manganese 0.10% Zinc		
RECOMMENDED RATES		
EDTA CORN MIX	EDTA SOYBEAN MIX	FOLIAR MICROBLEND
1 to 2 quarts/acre banded. 2 to 2.5 quarts/acre broadcast.	1 to 2 quarts/acre banded. 2 to 3 quarts/acre broadcast.	Foliar application: 2 to 4 quarts/acre. Aerial application: 1 to 2 quarts/acre. Soil application: 2 to 4 quarts/acre.