

USE  
IN

**V**  
VEG

**B**  
BLOOM

**S**  
SOIL

**C**  
COCO

**H**  
HYDRO

**GREEN9**  
NUTRIENT

# Key To Life®



# Green9

## WHAT IS IT...

6-0-0

Derived from Non-GMO Soy Protein Hydrolysate

Micronutrition is one of the main driving factors in plant health, nutrient density and total harvest weight. We have tied 8 of the most important and most difficult micronutrients for plants to access to our amazing non-GMO amino acid powder. Giving our growers a 100% immediately available & 100% soluble micronutrient that is great as either a foliar or a root drench. Green9 will ensure jealous friends and busted drying racks/scales when harvest season comes. The only bad thing about Green9 is your immediate need for a bigger grow & harvest room! We are going to need a BIGGER boat!

0.83% Magnesium (Mg)	1.17% Manganese (Mn)
9.8% Sodium (Na)	1.51% Copper (Cu)
2.63% Iron (Fe)	0.12% Molybdenum (Mo)
3.97% Zinc (Zn)	0.66% Boron (B)

## HOW + WHEN TO USE IT...

• Try Green9 in ANY growing system!

## ROOT DRENCH (PER GAL)

	VEG				BLOOM								
	1	2	3	4	1	2	3	4	5	6	7	8	9
tsp	1	1	1	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	1	3/4	1/2
grams	4	4	4	6	6	6	6	8	8	8	4	3	2

## INJECTION CHART

Setting	%	Low Dose		High Dose	
		grams / gal	total grams	grams / gal	total grams
1 to 100	1%	2 g	200	8 g	800
1 to 200	0.5%	2 g	400	8 g	1600
1 to 500	0.2%	2 g	1000	8 g	4000

## HOW IT WORKS...

- Micronutrients are essential to plant growth & plant health.
- Green9 is specifically formulated to provide essential nutrition, in a plant-based form, to all types of agriculture.
- Green9 is immediately available, similar to synthetic nutrients, but in a plant-based water-soluble form.
- When paired with amino acids, these micronutrients provide can help increase the health of your crop drastically.
- Increasing nutrient density in your system helps to increase potential biomass of plant material.
- They are delivered across cell walls of root tissue via root radicles, or they are absorbed through the leaf stomatas.
- Micronutrients also help to increase Brix levels (natural plant sugars) as well as oil, terpenes, and other desirable plant extracts.

## CONVERSION

Volume	Weight (g)
1 tsp	3.8
1 Tbsp	11.0
1 Cup	176.0

## RESERVOIR DOSAGE

Reservoir Size (Gal)	GREEN9	
	2 g/gal	8 g/gal
	Total Nutrient Input (g)	
5	10.0	40.0
25	50.0	200.0
50	100.0	400.0
100	200.0	800.0
250	500.0	2000.0

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## PRO TIPS...

- Use Green9 in conjunction with Cal[No]Mag for optimal results.
- We separate the two products for a very specific reason. Calcium & Magnesium tend to interact negatively with Phosphates and other nutrients when they are in the same container. Separating Calcium from these 8 micronutrients provides an optimal delivery system that your plant will respond to positively.
- Good for ALL stages of growth!

### COST PER DOSE

GREEN9		
Size	2 g/gal	10 g/gal
	Cost per Dose	
8 oz.	\$0.282	\$1.41
32 oz.	\$0.207	\$1.04
2 Gal. (4lb)	\$0.178	\$0.89
5 Gal. (10lb)	\$0.149	\$0.74
20 lb.	\$0.119	\$0.60
50 lb.	\$0.090	\$0.45

### HOW MANY GALLONS

GREEN9		
Size	2 g/gal	8 g/gal
	Total Gallons Made	
8 oz.	113.4	28.3
32 oz.	453.6	113.2
2 Gal. (4lb)	907.2	226.4
5 Gal. (10lb)	2268.0	566.0
20 lb.	4536.0	1132.0
50 lb.	11340.0	2830.0

## MICRONUTRIENT ATTRIBUTES...

Name	Elemental Sign	Micronutrient Class	Functions
Magnesium	Mg	Secondary	Assists photosynthesis and contributes to protein synthesis Central atom in chlorophyll Many enzymes require this to function properly Deficiency can cause yellowing between veins Toxicity = RARE Antagonistic with Calcium and Potassium when overfed
Sodium	Na	Non-Essential	Can be used to aid in metabolism and chlorophyll synthesis Aids in closing leaf stomatas Can cause burnt leaf tips when overfed Can aid in osmosis and regulate internal water balance Deficiency = EXTREMELY rare
Iron	Fe	TRUE	Most important micronutrient Availability is 100% pH dependant Essential for chlorophyll formation Constituent of many enzymes and pigments Deficiency appears as chlorosis In the EDTA form
Zinc	Zn	TRUE	Activates enzymes that stimulate plant protein synthesis Helps convert starches to sugars and for carbs Helps plants withstand cold temperatures Essential for formation of plant auxins responsible for stem elongation Deficiency appears as necrotic spots on leaf margins Deficiency should be addressed before damage is irreversible
Manganese	Mn	TRUE	2nd in importance behind iron and is very important in chlorophyll production Essential for respiration, photosynthesis and nitrogen assimilation Involved in pollen germination, pollen tube growth Also involved in root cell elongation and resistance to root pathogens Deficiency occurs at pH above 6.5 but it is most available at a pH lower than 5.5 Appears as tan sunken spots in chlorotic areas between veins Immobile so you will see it in new growth
Copper	Cu	TRUE	Part of enzymes essential for the formation of chlorophyll and the synthesis of lignin Required for photosynthesis, plant respiration and metabolism of carbohydrates and proteins Very important for flavor/terpene/color intensity Immobile so deficiency occurs in new growth where it loses sheen and sometimes wilts Apical meristems become necrotic and die Excess P or K can cause deficiency
Boron	B	TRUE	Used with calcium to synthesise cell walls and helps regulate hormone levels Used in higher amounts to help with reproductive growth, pollination and seed development Assists in the translocation of carbs/sugars and potassium to leaf stomatas Assists nitrogen metabolism and formation of proteins Deficiency appears as "rosetting" in new growth, flowers and root tips
Molybdenum	Mo	TRUE	Required last and in the least amount Essential for enzymes that convert nitrate to nitrite to ammonia to synthesise amino acids Required to fix nitrogen in legumes Used to convert inorganic phosphorus to organic, plant available phosphorus Deficiency appears in older leaves and causes paleness, then spreads to new growth May also cause leaves to "shrink" in size, especially in severe cases

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