

APPLICATION RATES AMOUNTS IN ML/GAL

CNS17 Grow, Bloom and Ripe Amounts in ml/gallon (4l) 1 teaspoon=5 ml 1 tablespoon=15 ml 1 ounce=30 ml 1/2 - 1 gm = 1/4 - 1/2 tsp 3/4 gm = 1/4 tsp

HYDROPONICS / COCO AND SOIL												
Plant Phase	Clones / Seedlings	Vegetative		Transition	Early Bloom		Mid Bloom		Late Bloom			Pre-Harvest 2-3 Days
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	
CNS17 Grow Hydro or Soil	15	20	25	15	0	0	0	0	0	0	0	0
CNS17 Bloom Hydro or Soil	0	0	0	10	25	25	25	0	0	0	0	0
CNS17 Ripe	0	0	0	0	0	0	0	25	25	25	15	0
FOR FAST BLOOMING ANNUALS												
CNS17 Grow Hydro or Soil	15	20	25	15	0	0	0	0	0	0	0	0
CNS17 Ripe	0	0	0	10	25	25	25	25	25	25	0	0

*Note: for optimal results use in conjunction with reverse osmosis water.

**Note: reducing fertilizer application rates 10 - 15% when using (multiple) supplements can help regulate ppm levels.



CNS17™

COMMERCIAL NUTRIENT SYSTEM

THE NEW STANDARD

Formulated Using Revolutionary Suspension Technology

Guaranteed Minimum Analysis

Original Hydroponics Formula **GROW:**

Total Nitrogen (N)	3.0%
0.14% Ammoniacal Nitrogen	
2.86% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	2.0%
Soluble Potash (K ₂ O)	4.0%
Calcium (Ca)	2.8%
Magnesium (Mg)	0.5%
0.5% Water Soluble Magnesium (Mg)	
Sulfur (S)	1.10%
1.10% Combined Sulfur (S)	
Manganese (Mn)	0.05%
0.05% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.0005%

Original Hydroponics Formula **BLOOM:**

Total Nitrogen (N)	2.0%
0.09% Ammoniacal Nitrogen	
1.91% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	2.0%
Soluble Potash (K ₂ O)	5.0%
Calcium (Ca)	2.0%
Magnesium (Mg)	0.5%
0.5% Water Soluble Magnesium (Mg)	
Sulfur (S)	1.14%
1.14% Combined Sulfur (S)	
Manganese (Mn)	0.05%
0.05% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.0005%

Guaranteed Minimum Analysis

Coco & Soil Formula **GROW:**

Total Nitrogen (N)	3.0%
0.14% Ammoniacal Nitrogen	
2.86% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	1.0%
Soluble Potash (K ₂ O)	2.0%
Calcium (Ca)	3.6%
Magnesium (Mg)	0.5%
0.5% Water Soluble Magnesium (Mg)	
Manganese (Mn)	0.05%
0.05% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.0005%

Coco & Soil Formula **BLOOM:**

Total Nitrogen (N)	2.0%
0.09% Ammoniacal Nitrogen	
1.91% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	2.0%
Soluble Potash (K ₂ O)	3.0%
Calcium (Ca)	2.5%
Magnesium (Mg)	0.5%
0.5% Water Soluble Magnesium (Mg)	
Sulfur (S)	1.14%
1.14% Combined Sulfur (S)	
Manganese (Mn)	0.05%
0.05% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.0005%

Guaranteed Minimum Analysis

RIPE Formula:

Total Nitrogen (N)	1.0%
1.0% Nitrate Nitrogen	
Available Phosphate (P ₂ O ₅)	5.0%
Soluble Potash (K ₂ O)	4.0%
Calcium (Ca)	1.25%
Magnesium (Mg)	0.5%
0.5% Water Soluble Magnesium (Mg)	
Sulfur (S)	0.5%
0.5% Combined Sulfur (S)	
Manganese (Mn)	0.01%
0.01% Water Soluble Manganese (Mn)	
Molybdenum (Mo)	0.0005%

Original Hydroponics Formula, Coco & Soil Formula, and new Ripe Formula



Ripe
CNS17
COMMERCIAL NUTRIENT SYSTEM



Ripe Formula 1-5-4

Ripe's 1-5-4 NPK is designed to help promote ripening in your fruiting and flowering plants. Ripe keeps your plants looking lush and green while providing more of the elements needed to help ripen and enhance your yield. This easy to use product works by depleting the nitrogen to a minimum level while leaving the phosphorous and potassium at optimal ranges to encourage a plant to focus its energy on its reproductive function - ripening its fruit faster while still maintaining its foliage. Great for both soil and soilless gardens. Ripe can be used with either the CNS17 Soil and Coco or the CNS17 Hydrogardening formulas.

Benefits of using CNS17 Ripe:

- + Ripening stage specific formula
- + Economical value.
- + Superior performance.
- + Multiple crops.
- + Multiple grow substrates.
- + Complete liquid fertilizer program.
- + Easy to use.
- + Optimum levels of calcium and nitrogen.



SIMPLE. EFFECTIVE. AFFORDABLE.

A ONE-PART, STAND ALONE PROFESSIONAL HYDROPONIC FERTILIZER



100% Satisfaction Guaranteed

ORIGINAL HYDROPONICS FORMULA
CNS17
COMMERCIAL NUTRIENT SYSTEM



ORIGINAL HYDROPONICS FORMULA
CNS17
COMMERCIAL NUTRIENT SYSTEM



Original Hydroponics Formula GROW: 3-2-4 BLOOM: 2-2-5

Designed with the commercial grower in mind, CNS17 is a highly concentrated, economical fertilizer that produces premium results. CNS17 is an element rich plant food, with seventeen essential elements, and is ideal for producing consumable goods.

CNS17 is ideally suited for a wide range of vegetable, flower, and fruiting crops grown in hydroponics or soil. CNS17 is effective in: Rockwool, clay aggregate, Perlite, and peat moss, as well as hydroponic growing methods including: top feed drip, ebb and flow, aeroponics and nutrient film technique. While growers will find CNS17 to be very effective in all substrates, those using coir fiber will be particularly impressed. CNS17 contains optimum levels of calcium and nitrogen required to offset the high level of potassium that naturally occurs in coir fiber.

CNS17 is the result of a new fertilizer production technology that allows us to produce a professional strength, one part, stand alone fertilizer containing all the required nutrient ions in the correct balance. CNS17 combines high levels of calcium with sulfates and phosphates to guarantee a complete spectrum of plant nutrients. Virtually no other commercial hydroponic nutrient supplied in a single part can compare to the spectrum of nutrients in CNS17. Additionally, the molecular composition of CNS17 in dilution with water causes the organic structures to hydrolyze and provide an energy source for beneficial microbes in solution. CNS17 contains chelates which protect ions such as iron, manganese and zinc, which can improve availability under a range of conditions. Nitrogen is supplied almost entirely as the optimum nitrate source.

COCO & SOIL FORMULA
CNS17
COMMERCIAL NUTRIENT SYSTEM



COCO & SOIL FORMULA
CNS17
COMMERCIAL NUTRIENT SYSTEM



Coco & Soil Formula GROW: 3-1-2 BLOOM: 2-2-3

Botanicare is pleased to introduce CNS17 Coco & Soil Grow, and Bloom Formulas as an effective one part nutrient program. Dr. Lynette Morgan formulated CNS17 Coco & Soil to be used in applications that have coir fiber as the substrate. This new formula has an adjusted NPK ratio that is specifically balanced for coco based soils, but can also be used in traditional hydroponic soilless media.

While many of us know about coir and its excellent air to water ratio, many growers are still unfamiliar with the sodium levels associated with it. As coir fiber is processed it retains high levels of salts (mainly potassium) that can adversely affect a plants nutrient uptake.

The cation exchange capacity (CEC) of a grow substrate refers to the substrate's capacity to retain nutrients for plant uptake between fertilization periods. Usually, an increased CEC, indicates a greater capacity for the grow substrate to avoid nutrient loss (leaching) during irrigation and act as a guard against sudden shifts in soil salinity and pH.

CEC is the sum of exchangeable cations (positively charged ions) soil can absorb per unit weight or volume and is usually measured in milligram equivalents per 100g (meq/100g).

Due to the high CEC inherent in coir fiber, a balanced nutrient program designed for coir substrates can greatly increase the performance of a coco based substrate by off-setting the Nitrogen and Calcium draw without increasing the potassium levels to an unusable level.

By providing your plants with balanced nutrition you can feel confident that they will grow strong and healthy just as we would if we ate accordingly. Anyone who has ever felt sluggish and weak simply because of poor diet can relate to this comparison.