

### ***VERTI-GRO 5-10-25 HYDROPONIC NUTRIENT***

(A proven nutrient tested for 25 years on commercial crops)

Hydroponic nutrients contain all of the essential 13 elements for healthy plant growth. Using hydroponic nutrient is simple. *All you need to do is add water.* The 5-10-25 is a 2-part solution, which means it contains everything but Calcium. The 5-10-25 formula contains **Magnesium and Sulfur** in the form of **Epsom Salts** as well as Nitrogen, Phosphorus, Potassium and all the trace minerals. These elements have been formulated for a balanced nutrient solution. With the addition of Calcium Nitrate 15-0-0 (in equal amounts) you have a complete formula *that grows virtually anything, including normal feeding for houseplants.* Give it a try, and see the results.

*The following instructions help to simplify the process by first making a concentrated liquid of the 5-10-25 nutrient and the calcium nitrate 15-0-0.* Having the concentrated solution makes for easy nutrient mixing every two weeks when you are changing out your nutrients.

### **Please follow the directions below:**

1. You will end up making one-gallon containers of 5-10-25 Nutrient and Calcium Nitrate Nutrient in separate **concentrated solutions**. From these gallon concentrates, you will then measure specific amounts to add to your nutrient tank. (Milk jugs are OK) Label one as “5-10-25” and the other as “Calcium Nitrate”).
  2. To make the liquid concentrates add one pound of 5-10-25 to a gallon jug and fill with tap water. Shake until dissolved, as above. This gallon jug is labeled “5-10-25”.  
(Note: You can mix 1/2 lb. in 1/2 gallon also)
  3. Repeat the same procedure for the Calcium Nitrate 15-0-0. (1 pound in one gallon). This gallon jug labeled “Calcium Nitrate”. (Note: You can also mix 1/2 lb. in 1/2 gallon of water for storage convenience)
  4. Each 8 ounce cup of the concentrated solution equals 1 ounce of dissolved 5-10-25 or 1 ounce of dissolved Calcium Nitrate 15-0-0, that you will be using in the next step.  
(For strawberries use 1/2 ounce per gallon)
  5. After having filled your nutrient tank full of water, add 1 cup of each concentrated liquid solution (**not** dry fertilizer) to each 10 gallons of water in your nutrient tank.  
(\*You are using liquid concentrates from step #4)
- 1 stack unit tank holds 10.0 gallons>>> Add 1 cup of each liquid concentrate solution to the tank
  - 2 stack unit tank holds 12.5 gallons >>>Add 1.25 cups of each liquid concentrate solution to tank

**NOTE:** If you dissolve 2 pounds in one gallon then only use 1/2 ounce per gallon in your tank.

(This is half as much as stated above because it is twice as concentrated. See instructions on bag)

**Maintaining Your System:** Try to keep the tank full and top it off with only water every day or two depending on the amount of nutrient solution used per day. **It is best not to let the tank drop below 25% of its volume. At any time you may make up the volume of nutrient used by mixing up 1 oz. per gallon.** For example: if the tank is half full and it is a 10 gallon tank then add 5 ounces to 5 gallons and re-fill the tank. You may also keep a 5 gallon bucket ready for use and add what you need every day or two. After 2 to 3 weeks the old fertilizer solution can then be used on houseplants, gardens, trees, grass, etc... **We recommend a two to three week** nutrient change cycle due to water quality variances and because hydroponic solutions get out of balance after a period of time. This creates unwanted and unusable salt build up in the hydroponic growing system results in decreased plant growth.

(This clear tubing is available at most hardware stores)

Drain until most of the old nutrient is gone. Some water and nutrient may remain without harming anything. **We recommend cleaning out the entire tank every 6-7 months. Use Clorox bleach to clean the tank.**

This hydroponic solution has been formulated to adjust the pH (acidity) automatically in most cases. Normally no adjustments are needed **if you are keeping up with your two to three week nutrient change cycle.** Check your solution with a pH kit regularly for the first 2 weeks and periodically after that. If the liquid turns slightly yellow it is OK. Inexpensive pH test kit (\$9.95) can also be very helpful for this process. **These Becket test kits are available at Home Depot and Wal-Mart. If you choose to use a pH test kit, pH should stay in the range of 5.5 and 6.0.** A pH of 5.5-6.0 is the safest range for a variety of plants grown in the same fertilizer solution. A pH between 5.5 to 6.0 allows your plants to uptake minerals most effectively. A simple way to know pH is correct is to pump your system out, and start from step #5 above. **Verti-Gro** will check your water and nutrient solution for pH and salt level for free. Just send a 4-ounce bottle to:

**Verti-Gro, Inc.**

**P.O. Box 669**

**Lady Lake, FL 32158**

Enjoy the simplicity of a soluble balanced fertilizer. Try it on your house plants and garden plants. You will be pleased with the results!

“Don’t use substitutes that are unproven. All elements must be present in the hydroponic formula.”