

# WHY HGV?

## THE TWO-PART DRY FERTILIZER FOR COMMERCIAL CULTIVATORS

HGV was founded by Ron Goldman in 1989, when he developed a complete plant nutrient solution for his commercial facilities.



Ron Goldman

HGV started marketing its products to other commercial growers in 2014.

The mission: to provide commercial growers with the same formulations that had been tested and proven to provide superior results in Ron's own facilities over the last 25 years.

## TAKE IT TO THE LIMITS.

HGV proudly manufactures every bag in our own production facility in Southern California. HGV is one of the only nutrient companies that blends its own product using proprietary equipment designed and custom built just for us. HGV has been sourcing raw materials from the same suppliers for over 30 years, which ensures the batch-to-batch consistency that our customers rely on.

### MAKE IT SIMPLE. MAKE IT COMPLETE.



HGV consists of three parts in total, Flowering, Growth, and Base. The Base is used with either the Growth formula OR the Flowering formula to create a 100% complete nutrient for all growth stages.

### READY TO SCALE.



As you expand operations, you need to streamline SOPs, regulate inputs, and simplify your processes. HGV enables efficiency by only having to use two parts while still providing all necessary plant inputs at each stage of growth.

### FOR SERIOUS GROWERS.



HGV was made for commercial growers looking to maximize harvests while managing costs. We utilize the highest quality raw materials so growers get the best results.



# HOW TO STORE HGV NUTRIENTS



## STABILITY IS KEY

The raw materials used to create HGV are all “hygroscopic” or “water seeking”, meaning they readily absorb moisture from the atmosphere in which they are stored.

This can cause the product to stick to itself or become cakey, and in extreme cases cause deliquescence, where the material will liquify. **This is why holding the product in a stable environment is crucial for storage, even short term.**



## SIGNS OF STORAGE ISSUES

If your storage environment fluctuates temperature over a 24-hour period, the product will absorb or adsorb moisture. Signs that you have a storage issue:

- (1) Product becomes hard in the bag.
- (2) Bags start to “sweat” – causing the product to dissolve inside the bag and leak out.



## STORAGE GUIDELINES

To prevent these issues, ideally keep the temperature in your storage location between 60-65 degrees with 35-40% relative humidity. If you cannot maintain this tight of an environment, you can still minimize environmental affects by keeping the temperature and humidity as stable as possible.

If there is no way to store the product in a stable environment, turn it into a liquid concentrate as quickly as possible. Keep the container you make the concentrate in sealed tightly and stored out of direct sunlight.



# HOW TO USE HGV

## MIXING EXAMPLES

We've always seen the best results starting at an EC of 3.0. Use the chart below to determine the correct amount of each part needed to hit an EC of 3.0. **Your numbers may be slightly higher or lower based on your source water.** Adjust accordingly based on the upper part of the chart. When making adjustments, the ratio between Base formula and either Growth or Flowering formula will always be 0.6:1.

### 200 GALLON RESERVOIR AT 3.0 EC

Grams per Gallon at **3.0 EC = 7 grams for Flowering or Growth** and **4.2 grams of Base**. Therefore a **200-gallon reservoir** would need **1,400 grams of Flowering or Growth** and **840 grams of Base**.

Using **HGV liquid concentrate** for this same example, you would need **4,600 mL of Flowering or Growth (23 mL x 200)** and **2,800 mL of Base (14 mL x 200)** to achieve **3 EC**.



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## HOW TO TURN HGV INTO A LIQUID CONCENTRATE

For long term storage, we recommend turning into a liquid concentrate.

### STEP 1.

Maximum solubility of HGV Flowering and Growth formulas is 2.5 lbs. per gallon at room temperature. Use 10 gallons of water for each 25 lb. bag. Utilizing hot water will speed up the amount of time it takes to dissolve a 25 lb. bag.

### STEP 2.

Mix the solution. Using a long handled paint/mud stirrer connected to a cordless drill will speed up the process. Continue mixing until the product is completely dissolved in water.

### STEP 3.

Once fully dissolved, store the solution in a cool, dark place with a tight-fitting lid on the container.

For liquid concentrate, utilize the ML/GAL scale from the chart below. 1 dry gram of HGV = 3.34 mL of liquid concentrate.

EC	PPM 500	PPM 700	FLOWERING/GROWTH		BASE	
			GRAMS/GAL	ML/GAL*	GRAMS/GAL	ML/GAL*
0.5	250	350	1.2	4	0.7	2
1.0	500	700	2.3	8	1.4	5
1.5	750	1050	3.5	12	2.1	7
2.0	1000	1400	4.7	16	2.8	9
2.5	1250	1750	5.8	19	3.5	12
3.0	1500	2100	7.0	23	4.2	14
3.5	1750	2450	8.2	27	4.9	16
4.0	2000	2800	9.3	31	5.6	18

\*25 LB BAG INTO 10 GALLONS OF WATER

1 lb = 454 grams | 1 gal = 3,785 mL | 25 lb = 11,340 grams | 10 gal = 37,854 mL

1 gram of salt = 3.34 mL of liquid concentrate