

# Pinnacle GROW

PROFESSIONAL GRADE NUTRIENTS

# INFORMATION AND USER GUIDE

REACH FOR THE PINNACLE



## Pinn-Bloom Water Soluble Fertilizer

**GUARANTEED ANALYSIS**

Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	18.0%
Soluble Phospor (K <sub>2</sub> O)	26.0%
Magnesium (Mg)	5.25%
Sulfur (S)	11.00%
Boron (B)	0.00%
Iron (Fe)	0.00%
0.14% Chelated Iron	0.14%
Manganese (Mn)	0.07%
0.07% Chelated manganese	0.07%
Molybdenum (Mo)	0.006%

**CAUTION:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

**ATTENTION:** This fertilizing material contains Boron (B). The use of this fertilizing material on any crop other than those recommended may result in serious injury to crops.

**ATTENTION:** This product contains molybdenum (Mo). The application of fertilizing materials containing molybdenum (Mo) may result in serious injury to crops containing Boron (B) which are toxic to various animals.

**KEEP OUT OF REACH OF CHILDREN**  
Resists heat, moisture, and other environmental conditions. Do not use in areas where children play. Do not use in areas where livestock graze. Do not use in areas where crops are raised. Do not use in areas where crops are raised. Do not use in areas where crops are raised.

Derived from potassium sulfate, potassium phosphate, magnesium sulfate, sodium borate, iron DTPA, manganese EDTA, sodium molybdate

**WARNING:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

Net Weight: 250kg / 11.34 tpa  
Batch No.:

Manufactured for and Distributed By: Pinnacle Grow

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## Pinn-Veg 8-14-26 Water Soluble Fertilizer

**GUARANTEED ANALYSIS**

Total Nitrogen (N)	8.00%
5.0% Ammoniacal Nitrogen	
3.0% Nitrate Nitrogen	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	14.0%
Soluble Potash (K <sub>2</sub> O)	26.0%
Magnesium (Mg)	2.80%
Boron (B)	0.050%
Iron (Fe)	0.300%
0.30% Chelated Iron	0.100%
Manganese (Mn)	0.100%
0.10% Chelated manganese	0.010%
Molybdenum (Mo)	0.010%
Zinc (Zn)	0.050%

**CAUTION:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

**ATTENTION:** This fertilizing material contains Boron (B). The use of this fertilizing material on any crop other than those recommended may result in serious injury to crops.

**ATTENTION:** This product contains molybdenum (Mo). The application of fertilizing materials containing molybdenum (Mo) may result in serious injury to crops containing Boron (B) which are toxic to various animals.

**KEEP OUT OF REACH OF CHILDREN**  
Resists heat, moisture, and other environmental conditions. Do not use in areas where children play. Do not use in areas where livestock graze. Do not use in areas where crops are raised. Do not use in areas where crops are raised. Do not use in areas where crops are raised.

Derived from monopotassium phosphate, monoammonium phosphate, potassium nitrate, magnesium sulfate, sodium borate, iron EDTA, manganese EDTA, sodium molybdate and zinc EDTA.

**DIRECTIONS FOR USE (Use only as Directed for Commercial Growers Only)**

**WARNING:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

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**WARNING:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

**ATTENTION:** This fertilizing material contains Boron (B). The use of this fertilizing material on any crop other than those recommended may result in serious injury to crops.

**ATTENTION:** This product contains molybdenum (Mo). The application of fertilizing materials containing molybdenum (Mo) may result in serious injury to crops containing Boron (B) which are toxic to various animals.

**KEEP OUT OF REACH OF CHILDREN**  
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Derived from monopotassium phosphate, monoammonium phosphate, potassium nitrate, magnesium sulfate, sodium borate, iron EDTA, manganese EDTA, sodium molybdate and zinc EDTA.

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For more information, visit us at  
order please scan QR code

Kchemical  
WWW.KCHEMICAL.COM

## AMERICAN Calcium Nitrate 13-0-0 PLUS 18 Calcium

No Added Ammonium Fertilizer Greenhouse Grade

**Guaranteed Analysis**

TOTAL NITROGEN (N)	13.0%
UREA NITRATE NITROGEN	13.0%
CALCIUM (Ca)	18.0%

Derived from calcium nitrate trihydrate  
MANUFACTURED IN AMERICA

55 Pound (24.9 kg)

**DIRECTIONS FOR USE:**  
For use as a fertilizer in greenhouses and for agricultural crops.

**IMPORTANT USE INSTRUCTIONS:**  
This product contains calcium nitrate trihydrate. It is highly soluble and should be used as a top-dress fertilizer. Do not use in areas where crops are raised. Do not use in areas where crops are raised. Do not use in areas where crops are raised.

**KEEP OUT OF REACH OF CHILDREN**  
Resists heat, moisture, and other environmental conditions. Do not use in areas where children play. Do not use in areas where livestock graze. Do not use in areas where crops are raised. Do not use in areas where crops are raised. Do not use in areas where crops are raised.

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**DIRECTIONS FOR USE (Use only as Directed for Commercial Growers Only)**

**WARNING:** This product contains Boron, Copper, Iron, Magnesium, Manganese, Molybdenum, and Zinc. Should be used as recommended. Misuse may provide harmful. Do not use with highly soluble, strong materials. Sulfuric acid should not be used.

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Batch No.:

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# STOCK TANK MIXING

## STANDARD OPERATING PROCEDURES

Proper mixing and preparation of concentrated stock solutions is crucial for maintaining nutrient stability and consistency. Inconsistent EC or incorrect nutrient ratios from improperly mixed stock tanks can lead to nutrient deficiencies or toxicity.

**This SOP covers best practices for stock solution mixing to support a well-balanced fertilizer program.**

## REQUIRED INPUTS

### BAG 1



**PinnVeg Mix 8-14-26 Water Soluble  
Hydroponic Plant Nutrient**

Size: 25 Pound

SKU: NPIN008

### BAG 2



**PinnBloom Mix 0-18-26 Water  
Soluble Hydroponic Plant Nutrient**

Size: 25 Pound

SKU: NPIN005

### BAG 3



**Americal Calcium  
Nitrate**

Size: 55 Pound

SKU: NKH158

### BAG 4



**Kchemical Hygro-Cal Calcium  
Chloride**

Size: 50 Pound

SKU : NKH100

# INSTRUCTIONS

**Vegetative Phase** : Use equal parts from tank 1 and tank 2 to reach desired EC.

**Bloom Phase** : Use equal parts from tank 3 and tank 4 to reach desired EC.

1. Fill stock tank to 70% of capacity
2. Add fertilizers slowly and ensure adequate agitation/mixing
3. Finish filling stock tanks to target volume
4. Use full bags if possible or measure fertilizers using a scale
5. Let solution settle for 20-30 minutes before use to allow any insoluble particulate to settle
6. There should be very little particulate or undissolved salts in tank
  - a. If there are larger quantities of undissolved salts a water test should be performed.
  - b. Undissolved particulate can be removed using disc or screen mesh filtration or dumped out of stock tanks.
7. Check batch tanks or final solution EC/pH to ensure specifications are within desired range

Tip: Ensure pH is not above 6.0 when adding Calcium Nitrate for increased solubility and reduced fallout.



## VEG STOCK **TANKS**

### STOCK TANK 1

PinnVeg  
**2 Pounds/Gallon**



### STOCK TANK 2

Americal  
Calcium Nitrate  
**1.5 Pounds/Gallon**



Use equal  
parts from  
tank 1 & tank 2  
to reach  
desired EC



VEG - BATCH DAY TANK  
(Ready to Use)

## BLOOM STOCK **TANKS**

### STOCK TANK 3

PinnBloom  
**2 Pounds/Gallon**



### STOCK TANK 4

Americal  
Calcium Nitrate  
**1 Pound/Gallon**  
+ Kchemical Hygro-Cal  
Calcium Chloride  
**0.1 Pound/Gallon**



Use equal  
parts from  
tank 3 & tank 4  
to reach  
desired EC



BLOOM - BATCH DAY TANK  
(Ready to Use)

# STOCK TANK CONCENTRATIONS

## VEGETATIVE PHASE

## BLOOM PHASE

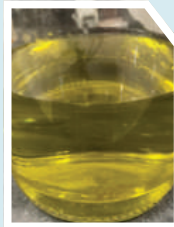


### TANK 1

PinnVeg - 2 Pounds/Gallon

### TANK 2

Americal Calcium Nitrate -  
1.5 Pounds/Gallon



### TANK 3

PinnBloom - 2 Pounds/Gallon

### TANK 4

Americal Calcium Nitrate - 1 Pound/Gallon + Kchemical  
Hygro-Cal Calcium Chloride - 0.1 Pound/Gallon

## EXAMPLES

### a. Instructions for making 100 Gallon Stock Tanks



#### STOCK TANK 1

#### PinnVeg

Mix in 200 pounds of PinnVeg



#### STOCK TANK 2

#### Americal Calcium Nitrate

Mix in 150 pounds of Americal



#### STOCK TANK 3

#### PinnBloom

Mix in 200 pounds of PinnBloom



#### STOCK TANK 4

#### Americal Calcium Nitrate

Mix in 100 pounds of Americal

#### Hygro-Cal Calcium Chloride

Mix in 10 pounds of Hygro-Cal

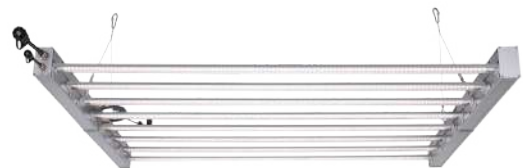
### b. Instructions for reaching target EC levels



#### HPS growers commonly look for an EC value of 3.0

30 mL of PART A and 30 mL of PART B

(Increase/decrease in equal measure when adjusting for target value)



#### LED growers commonly look for an EC value of 3.5

35 mL of PART A and 35 mL of PART B

(Increase/decrease in equal measure when adjusting for target value)

# FEED CHARTS

## PinnVeg 8-14-26 (Grams/Gallon)

PinnVeg recommended feed chart

EC Charts for Veg Mix

Low

(Grams to 1 Gallon rate)

High

EC	PPM (500)	PPM (700)	PinnVeg 8-14-26 (Grams/Gallon)	Americal Calcium Nitrate (Grams/Gallon)	Injection Rate (ml/Gallon)
0.5	250	350	1.0	0.8	4.3
1.0	500	700	2.0	1.5	8.5
1.5	750	1050	3.0	2.3	13
2.0	1000	1400	4.0	3.0	17
2.2	1100	1540	4.4	3.3	19
2.4	1200	1680	4.8	3.6	20.5
2.5	1250	1750	5.0	3.8	21.5
2.6	1300	1820	5.2	3.9	22
3.0	1500	2100	6.0	4.5	25.5
3.2	1600	2240	6.4	4.8	27
3.5	1750	2450	7.0	5.3	30
4.0	2000	2800	8.0	6.0	34

## PinnBloom 0-18-26 (Grams/Gallon)

PinnBloom recommended feed chart

EC Charts for Flower Mix

Low

(Grams to 1 Gallon rate)

High

EC	PPM (500)	PPM (700)	PinnBloom 0-18-26 (Grams/Gallon)	Americal Calcium Nitrate (Grams/Gallon)	Hygro-Cal	Injection Rate (ml/Gallon)
0.5	250	350	1.00	0.50	0.05	4
1.0	500	700	2.00	1.00	0.10	9
1.4	700	980	3.00	1.50	0.15	13
2.2	1100	1540	5.00	2.50	0.25	21
2.6	1300	1820	6.00	3.00	0.30	26
2.8	1400	1960	6.50	3.25	0.33	28
3.0	1500	2100	7.00	3.50	0.35	30
3.5	1750	2450	8.25	4.13	0.41	35
4.0	2000	2800	9.50	4.75	0.48	41

Note: Feed Chart data assumes Reverse Osmosis water

## TANK LABELS

### TANK 1

**PINNVEG 8-14-26**



@ 2 POUNDS/GALLON

### TANK 2

**PINNBLOOM 0-18-26**



@ 2 POUNDS/GALLON

### TANK 3

**AMERICAL CALCIUM  
NITRATE 13-0-0**



@ 1.5 POUNDS/GALLON

### TANK 4

**AMERICAL 13-0-0  
+ HYGRO-CAL CALCIUM CHLORIDE**



@ 1 POUND/GALLON

@ 0.1 POUND/GALLON

