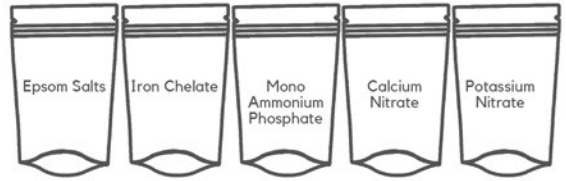


# Hydroponic Nutrients

## 100 ML Sachets

Pindpipe refresh pack

SKU IZ005



## PRO SERIES

Jee Aayan Nu.

Thank you for trusting us and purchasing our Hydroponic Pro Series 5 part Nutrients.

At Pindfresh we believe that you should know all the ingredients that go into growing your food. Every nutrient that you use - all the natural pesticides (we still use none ;-)) and what all is present in your growing mix.

To help in your journey of conscious growing and trying to be sustainably self-sufficient, we founded Pindfresh -- a healthier and more sustainably way of staying connected with nature.

We believe that a high quality input will yield a higher quality output. Our in house nutrient formulations form the backbone of all our hydroponic systems and we know they work because we use them in our commercial farms in Chandigarh!

We know because we grow! (checkout our indoor hydroponics systems and our indoor vertical climate controlled growing unit at [www.pindfresh.com](http://www.pindfresh.com)).

So welcome to Pindfresh and thank you once again. I do hope you enjoy your clean and healthy produce. Like we had in our villages - In our Pinds.

With much love  
Som

## The 5 part hydroponic pro series nutrients

**NUTRIENT No.1: Magnesium Sulphate, Borax, Manganese Sulphate, Zinc Sulphate, Copper Sulphate, Common Salt, Ammonium Molybdate**

**USED FOR:** Photosynthesis and respiration

**DEFICIENCY CAUSES:** Wilting shoots, poor bud development, chlorophyll starts degrading

**NUTRIENT No. 2: Iron Chelated**

**USED FOR:** Plants Strength, Chlorophyll, (Green color)

**DEFICIENCY CAUSES:** Plants leave turn yellow, then white and eventually die

**NUTRIENT No. 3: Mono Ammonium Phosphate**

**USED FOR:** Converts nutrients into usable building blocks for the plants to grow.

**DEFICIENCY CAUSES:** Plants become prone to disease attacks. Poor root development. Plant turns blue.

**NUTRIENT No. 4: Calcium Nitrate**

**USED FOR:** Responsible for holding together the cell walls of plants

**DEFICIENCY CAUSES:** New tissue such as root tips, young leaves, and shoot tips often exhibit distorted growth from improper cell wall formation.

**NUTRIENT No. 5: Potassium Nitrate**

**USED FOR:** Plant growth and reproduction

**DEFICIENCY CAUSES:** Brown scorching, curling of leaf tips, plant turns yellow between leaf veins. Purple spots may also appear on the leaf undersides.

# PRO SERIES

## INSTRUCTIONS

Check the PH of the hydroponic solutions before adding the nutrients, The PH should be about 6 - 6.5 (slightly acidic)

### DO NOT MIX NUTRIENTS IN CONCENTRATED FORM

#### INDIVIDUAL

1. Empty the contents of a single nutrient packet into a 100 ML bottle and mix well.
2. Do the same for all individual packets in 100 ML bottles.
3. We have provided you with a 100ml bottle in the package. Please use that to measure the concentrate solution in, and then transfer the same into another storage bottles.
4. At the end you should have 5 separate concentrated 100 ML solutions mixes in individual bottles.

#### MIX

Add the concentrate solutions (from the 100ML nutrients) into a 1 liter bottle. The ratios for doing this are given below

Make sure to shake the bottle well each time you add a nutrient.

Nutrient ratios to add according to the volume of the reservoir:

Nutrient 1	1 ml concentrate / 1 Liter water
Nutrient 2	1 ml concentrate / 1 Liter water
Nutrient 3	1 ml concentrate / 1 Liter water
Nutrient 4	2 ml concentrate / 1 Liter water
Nutrient 5	2 ml concentrate / 1 Liter water

Now add this mix slowly to your reservoir while checking the TDS every 10 minutes until desired TDS has been achieved.

Your growing system is now totally charged.

A few important tips for providing optimum nutrition:

1. Make sure that you mix the nutrients well, each time you add them into the reservoir.
2. Use warm water when dissolving nutrients No.4 (Calcium Nitrate) so as to dissolve the nutrient completely.
3. Add RO water to the reservoir in case the EC value is higher than aimed for.

## RESULTS

#### INITIAL READINGS

PH - 7.6  
TDS - 46  
TEMP - 18.7

#### AFTER 25 MINUTES

PH - 6.6  
TDS - 1170 PPM

#### AFTER 2 HOURS

PH - 6.6  
TDS - 1122

Of which individual contributions are as (in PPM) per liter of water:

SALT	PPM
Nutrient 1	200 - 218
Nutrient 2	35
Nutrient 3	140
Nutrient 4	650 - 700
Nutrient 5	300 - 306

Hydroponic parameters of some common plants:

Plants	Lettuce	Spinach	Tomato	Basil	Cucumber	Parsley
PPM	560-840	1260-1610	1400-3500	700-1120	1190-1750	560-1260
EC	0.8-1.2	1.8-2.3	2.0-5.0	1.0-1.6	1.7-2.5	0.8-1.8
pH	5.5-6.5	5.5-6.6	5.5-6.5	5.5-6.5	5.8-6.0	5.5-6.0

After 20 minutes check the EC & PH of the water and add more water or nutrient if required. The ideal PH and EC levels differ from plant to plant and can be found on our blog <http://www.pindfresh.com/index.php/ph-tds-ppm-levels-for-vegetables>

Note: Every plant requires a different PH and EC level - Please use the nutrients carefully