

# HYDROPERL

## EXPANDED PERLITE – HYDROPONIC CULTIVATION SUBSTRATE SOIL AMPLIFIER AND IMPROVER

**Product Description :** HYDROPERL is produced by mineral perlite, mined in the island of Milos in Greece. Perlite is an inorganic aluminosilicate mineral of volcanic origin with 3-4% crystalline water in its structure. Without any chemical admixture, perlite is heated to approximately 1.000°C, resulting in its expansion. The expanded product is further mechanically processed to improve its properties and then packaged. The final product's grain size is 1 - 3 mm. The material is very lightweight and can hold up to 3 - 4 times its weight in water. Its total porosity is about 95%. It is completely free of pathogens and weed seeds, and can also act as a temperature stabilizer. It is chemically inert and has a neutral pH. It does not rot, does not melt and has an unlimited lifespan.



**Usage :** HYDROPERL is used as a substrate for hydroponic cultivation. Available in special grow bags, 1 meter length and 33 liters volume, ready for planting. In this special type of grow bag, it is possible to install any crop at any planting density. The grow bags are made of special double-sided plastic, black on the inside and white on the outside, so that the light does not reach the root environment. The bag material is stabilized against chemicals and sunlight so that a lifespan of at least 3 years is ensured. HYDROPERL is also available in a plain 100 lt bag, for installation of the material in other cultivation systems (pots, channels, etc.), where the application of perlite in bulk is required.

**Technical Features :**

	Sieve (mm)	Passing (%)					
Grain size:	4	100					
	2	60 - 65					
	1	20 - 25					
	0.5	1 - 5					
	0.25	0 - 2					
Dry apparent weight :	60 - 80 kg/m <sup>3</sup>	(EN 13040)					
pH :	7.4 ± 1%	(EN 13037) 1:5 v/v sample/deionized water					
Electrical conductivity in extract :	15 - 20 µS/cm	(EN 13038) 1:5 v/v sample/deionized water					
Water Holding capacity :	520 - 540 ml H <sub>2</sub> O/100 g of sample	(Methods of analysis for soils)					
Typical chemical analysis :				Heavy metals :			
SiO <sub>2</sub>	73.1 %	Fe <sub>2</sub> O <sub>3</sub>	1.2 %	Cd	≤ 1.5 mg/kg	Pb	≤ 120 mg/kg
Al <sub>2</sub> O <sub>3</sub>	13.3 %	CaO	0.95 %	Cr VI	≤ 2 mg/kg	As	≤ 40 mg/kg
K <sub>2</sub> O	4.3 %	MgO	0.5 %	Hg	≤ 1 mg/kg	Cu	≤ 200 mg/kg
Na <sub>2</sub> O	3.3 %			Ni	≤ 50 mg/kg	Zn	≤ 500 mg/kg

No radioactivity is detected in the material.

**Packaging :** Bags of 33 lt & 100lt