

- Specification Sheet -**FREE-ROOT**

Free Root is a liquid product especially designed to unblock root operation in degraded soils because of high Sodium ions (Na^+) concentration.

PROPERTIES AND USES:

Free-Root functions at many levels in order to allow the operation of root and, as a consequence, of plant under conditions of salinity stress.

At ground level

- It decreases the levels of toxic Sodium (Na^+) in the soil
- It accelerates the drainage rate of Sodium salts
- It improves the chemical structure of the soil
- It restores the natural microflora of the soil
- It increases the plasticity of the soil
- It facilitates water filtering and draining

At plant level

- It decreases the ionic and osmotic stress caused by high salinity
- It allows the absorption, intake and transport of nutritional elements in plant tissues under conditions of high salinity
- It reduces deficiencies occurrence (especially of Nitrogen, Potassium and Calcium)
- It prevents plant cells senescence
- It increases the fotosynthetic capability of plants
- It enhances the proteinic synthesis and enzymes activity inside the plant cells

APPLICATION:

Free Root is applied by root irrigation via irrigation/fertilization system or foliarly after being diluted in an appropriate quantity of water. The number of required applications and the dosage are determined by soil conditions, irrigation water conductivity, climatic conditions and fertilization of cultures.

Application Rate: Generally it is applied at the following application rate.

Fertigation: 10-200 L per ha, depending on the crop.

STANDARD ANALYSIS**(w/w)**

Total Nitrogen (N)	0.10	%
Total Phosphorus (P_2O_5)	0.50	%
Total Potassium (K_2O)	0.50	%
Total Calcium (CaO)	3.80	%
Total Iron (Fe)	800	ppm
Total Zinc (Zn)	800	ppm
Total Manganese (Mn)	600	ppm

Total Copper (Cu)	100	ppm
Total Boron (B)	300	ppm
Total Molybdenum (Mo)	1	ppm

PHYSICAL PROPERTIES:

Appearance:	Green
Density:	1.02 g/ml
Solubility:	100% water soluble
pH:	2.9