

Shield

Endogenous defense promoter based on plant extracts

EC FERTILIZER

PK 11-7 FERTILIZER SUSPENSION WITH COPPER, MANGANESE, AND ZINC

SHIELD is a nutritional specialty based on plant extracts, brown algae, and minerals, designed to boost a plant's natural defense mechanisms. Thanks to its unique formulation—comprising oligosaccharides, amino acids, minerals, polyphenols, and vitamins—SHIELD nourishes the plant and stimulates the production of natural phytoalexins. These are defense compounds synthesized and accumulated by plants to enhance their resistance to attacks by pathogenic fungi and bacteria. The algae contained in the product are particularly significant; they are rich in growth-regulating substances—such as auxins, cytokinins, and gibberellins—as well as compounds that improve stress resistance, such as betaines.

The formulation is rounded out by the macronutrients phosphorus and potassium, along with the microelements copper, manganese, and zinc. These microelements are chelated with EDTA, ensuring rapid and effective absorption and helping plants overcome potential nutritional deficiencies.

With its plant-stimulating properties, SHIELD balances the plant's hormonal system, promoting rapid, healthy crop development and resulting in superior yields in terms of both quality and quantity.

- Induces the production of phytoalexins against pathogens and unfavorable soil-climatic conditions.
- Strengthens the leaf blade, thereby enhancing the plant's natural resistance to abiotic and biotic stresses.
- Improves overall plant health.
- Increases crop quality and yield.
- Particularly useful for application on grapevines, artichokes, and citrus fruits.

COMPOSITION (% w/w)

Phosphorus pentoxide (P₂O₅) 11
Potassium oxide (K₂O) 7
Copper (Cu) chelated with EDTA 0.5
Manganese (Mn) chelated with EDTA 0.5
Zinc (Zn) chelated with EDTA 0.5

PHYSICAL PROPERTIES

pH (1% solution) 6
Density (g/ml at 20°C) 1.2
Color Deep green

FORMULATION

Soluble liquid

PACK SIZES

1 L bottle
5 L jerrycan

PACKAGING

16 x 1 L bottles
4 x 5 L jerrycans

APPLICATION

Foliar
Root/Soil



1 L



5 L

MODE OF USE	CULTURE	WHEN TO APPLY IT	DOSES
Foliar	Fruit, vegetable, and ornamental crops; industrial crops.	2 – 4 applications throughout the cycle	150 – 200 ml/100 L of water
Radical	Fruit, vegetable, and ornamental crops; industrial crops.	2 – 4 applications throughout the cycle	4 – 5 L/ha

Precautions: The EDTA-chelated microelements copper, manganese, and zinc are stable within a pH range of 4 to 11. Shake the product well before use. Conduct preliminary tests before mixing with other products. Adhere to the specified dosage rates. The product is non-combustible and stable under ordinary temperatures and pressures. Store the product in well-ventilated areas at temperatures between +5°C and +35°C.

