



BIOTECH 3.10.5 S (2 MgO)

Organo-mineral eco-fertilizer NPK with potassium sulphate
Permitted in organic farming - Biostimulant



Recommended for:

Soil preparation of Vineyards and Orchards, and in particular in soils with phosphorus and magnesium deficiencies



AMINO ACIDS IN GRENA MATRIX

Aspartic acid	1,25	g/100 g
Glutamic acid	1,62	g/100 g
Alanine	1,02	g/100 g
Arginine	0,83	g/100 g
Phenylalanine	0,56	g/100 g
Gycine	0,95	g/100 g
Hydroxyproline	0,22	g/100 g
Isoleucine	0,62	g/100 g
Histidine	0,31	g/100 g
Leucine	1,10	g/100 g
Lysine	0,56	g/100 g
Proline	0,85	g/100 g
Serina	0,87	g/100 g
Tyrosine	0,33	g/100 g
Threonine	0,59	g/100 g
Valine	0,80	g/100 g
Cysteine and cystine	0,18	g/100 g
Methionine	0,19	g/100 g
Tryptophan	0,09	g/100 g

FREE AMINO ACIDS

Glutamic acid (free)	0,06	g/100 g
Alanine (free)	0,12	g/100 g
Leucine (free)	0,05	g/100 g

MICRO-ELEMENTS

B	2,30	mg/kg
Fe	330	mg/kg
Mn	18,6	mg/kg
Zn	33,6	mg/kg

COMPOSITION

Organic substance (SS)	36%
Amino acids and proteins	20%
Humic and fulvic acids	4%
Humidity	7%
Total nitrogen (N)	3%
Organic nitrogen (N)	3%
Total phosphoric anhydride (P ₂ O ₅)	10%
Total potassium oxide (K ₂ O)	5%
Organic carbon (C) of biological origin	20%
Sulphuric anhydride (SO ₃)	13%
Magnesium oxide (MgO) of mineral origin	2%
Calcium (CaO) natural origin	2%
C/N	6

SOURCE

Organic: hydrolyzed proteins of animal origin by thermal hydrolysis
Mineral: soft ground rock phosphate, potassium sulphate, dolomite

FEATURES

GRENA BIOTECH 3.10.5 S (2 MgO) is obtained by reaction between the organic matrix and mineral materials: soft ground rock phosphate, potassium sulphate and dolomite – all are allowed in organic farming.

The balanced allocation of organic nitrogen, phosphorus and potassium, makes GRENA BIOTECH 3.10.5 S (2 MgO) an excellent product Soil preparation of Vineyards and Orchards in the autumn-winter period. The presence of mineral magnesium activates the amino acids in the organic GRENA MATRIX, thus supporting the growth of plants and enhancing the taste of the fruit, while simultaneously building up the defenses of the plant.

More Humic and fulvic acids are contents in GRENA BIOTECH 3.10.5 S (2 MgO), they are responsible for the formation of organo mineral complexes, with the chemical elements present in the soil, which would otherwise be not solubilized.

GRENA BIOTECH 3.10.5 S (2 MgO) is available in micro-pellets (2 mm). The small size makes for a homogeneous distribution an important feature were GRENA BIOTECH 3.10.5 S (2 MgO) to be used on Vineyards and Orchards where it is not necessary to incorporate GRENA BIOTECH 3.10.5 S (2 MgO) into soil.

Nitrogen is present in the form of amino acids and protein. The nitrogen action is accentuated by the noteworthy presence of phosphorus (10%), which is made to react with the humic and fulvic acids present in the organic substance, to encourage the formation in the soil of highly available and stable complexes.

The presence of potassium sulphate – in soluble form and available for root absorption – promotes the formation of sugars. Magnesium, as part of the chlorophyll molecule, contributes substantially to vegetable and fruit crops, in order to prevent nutritional deficiencies and ensure the best physiological processes.

Physical state: pellet 4 mm - micro 2 mm

Packaging available: 25 kg bags - 500 kg big bags

CROP	TIMING*	APPLICATION*	DOSAGE/HA*
Vineyards	mid-autumn to late spring	scatter the product in soil preparation	500-600 kg/ha
Orchards (pome fruits, stone fruits, citrus fruits etc.)	mid-autumn to late spring	scatter the product in soil preparation	600-800 kg/ha
Vegetable and flower crops	mid-autumn to late spring	scatter the product in soil preparation	800-1000 kg/ha

* guidelines only, for the correct use of our products, please consult a specialist.