



## VIGORHUMUS H-00 (1,8-1,4-1,4)

### PRODUCT SUITABLE FOR ECOLOGIC AGRICULTURE UNDER REGULATION (CE) Nº 834/2007

Organic fertilisers are products with a guaranteed richness in humic, vegetal and organic matter, a suitable pH and high contents in primary macronutrients (NPK), secondary nutrients and micronutrients.

The organic fertiliser **VIGORHUMUS H-00** provides nutrients to the plants and improves the physical and chemical structure of the soil.

### Characteristics

**VIGORHUMUS H-00** is an organic fertiliser NPK (1,8-1,4-1,4) with a vegetal and animal origin. Its high contents of macronutrients, micronutrients and organic matter makes it ideal for the fertilization of the plants.

The following table shows the nutritive richness and other characteristics of the product.

PARAMETER	s.m.s.	s.m.f.
HUMIDITY (%)	0	33 - 43
pH	7,5 – 8,5	7,5 – 8,5
ELECTRIC CONDUCTIVITY (dS/m)	1,5 – 2,1	1,5 – 2,1
Total ORGANIC MATTER	48 - 52	29 - 35
Total NITROGEN (N)(%)	2,5 – 3,0	1,8
ORGANIC NITROGEN (N) (%)	1,5 – 2,0	1,0 - 1,4
PHOSPHORUS PENTOXIDE (P <sub>2</sub> O <sub>5</sub> ) total (%)	2,0 – 2,5	1,4
Total POTASSIUM OXIDE (K <sub>2</sub> O) (%)	2,0 – 2,5	1,4
Total CALCIUM (Ca) (%)	3,0 – 3,5	2,0 – 2,5
Total IRON (Fe) (%)	1,5 – 2,0	0,8 – 1,0
C/N RELATION	10 - 15	10 - 15
HUMIC ACIDS (%)	3,0 – 4,0	1,0 – 3,0
HEAVY METALS (Type)	A	A
<i>Salmonella</i> (absence/presence in 25g)	Absence	Absence
<i>E. Coli</i> (NMP/g)	< 9	< 9
GRANULOMETRY (90% of the product)	< 10 mm	< 10 mm

**VIGORHUMUS H-00** presents a high level of nitrogen (1.8%), the majority of which is present in an organic form (1.4%), thus being easily assimilable by the soil-plant complex. It also contains a high percentage of phosphor (1%), Fe(1%) and oxides (4 %).

The high organic matter content (40%) improves its physical, chemical and biological properties: it increases the cation-exchange capacity (CEC) of the exchange soil-plant complex, which improves the nutrient retention in the soil, which will subsequently be absorbed by the plant; it also improves the porosity of the soil and thus provides a better aeration and drainage.

The value of the C/N relation indicates a stable rate of the organic matter decomposition. It is also important to note the content in humic acids, as it contributes to the increase of the anion-exchange capacity (AEC) and, consequently, to the availability of nutrients in the soil-plant complex. These affect the soil structure, stabilizing the structure of sandy soils and favouring the loss of cohesion in the clay soils (increase of porosity, aeration and water circulation).

The content of heavy metals matches the A type classification, according to the Royal Decree 506/2013 of the 28<sup>th</sup> June on fertilising products. This is the lowest class of the existing ones, meaning that **VIGORHUMUS** is a high quality product.

During the composting the product is sterilised with a thermal treatment, which ensures that the sanitary control parameters of the fertilising product (*Salmonella* and *E. coli*) are between the ranks marked by the legislation (R.D. 506/2013 of the 28<sup>th</sup> June). The thermal treatment ensures the elimination of pathogen microorganisms, adventitious seeds and odours. The animal subproducts used for the production of **VIGORHUMUS H-00** fulfil the Regulation (CE) number 1774/2002 and its posterior modifications of October 3<sup>rd</sup>, which establishes the sanitary rules that are applicable to the subproducts of animal origin not destined to human consumption.

**VIGORHUMUS H-00** has a high humic potential due to its vegetal origin and it being enhanced with manure and coffee waste during the process.

The production process, as well as the final product, is under our strict quality controls in order to achieve both the clients' satisfaction and a deep environmental respect in all our activities.



## Format, application and dosage

**VIGORHUMUS H-00** is sold in bulk, big-bag and, 25 kg bag. The objective is to get used to the necessities of the client. The product has a small granulometry, without being dust, to ease the use for the farmer and its assimilation by the plant.

The product can be applied as a base or a cover fertiliser, but it is recommendable to apply it to the soil in winter, before sowing. It is recommended to add it to the soil by at 15cm depth, which is the zone with the best radicular absorption of the plant. It can also be applied in a localized way in woody crops to increment the levels of organic matter on the soil, thus improving the nutrition of the crops.

The following table shows the dose depending on the type of crop. It's advisable analyse the soil in order to determine the exact nutritive needs of the crops.

CROPS	Dose (*)
Fruity, citrus, subtropical	1,6 - 2,0 TM/Ha
Vine and olive	500 kg/Ha
Horticulture and flower growing	1,6 - 2,4 TM/Ha
Gardening	40 kg/100 m <sup>2</sup>
Grass	20 kg/100 m <sup>2</sup>

(\*) The doses are calculated for a working depth of 20cm. For a deeper working zone, it is necessary to proportionally increase the dose.

## Use in ecological agriculture

Ecological agriculture is based on the optimal use of the natural resources and the absence of use of the chemical products of synthesis and genetically improved organisms, in order to obtain quality crops with a high nutritional value.

*VIGORHUMUS H-00 is a product suitable for ecological agriculture in agreement to the **Regulations (CEE) 834/2007 of the Council, from 28<sup>th</sup> June 2007**, about production and labelling of ecological products with the register number **Nº CT71PAE-11** by the Organism of Control and Certification **Sohiscert**.*

*Registered in the Fertilisers Register (Royal Decree 506/2013, from 28<sup>th</sup> June, about fertilising products) with number F0000420/2017.*

