



## VIGORHUMUS Polvo

**VIGORHUMUS** is an organic humic amendment with physical and chemical properties that improve the physical, chemical and biological structure of the soil and bring nutrients to the cultivation; meaning it helps the ideal development of the plants.

**VIGORHUMUS** is very rich in organic nitrogen (2% ) and has a high percentage of organic matter; characteristics that make it the best solution for the soil fertilisation and the improvement of its structure.

**VIGORHUMUS** is inscribed in the Register of Fertilisers as stated in the Royal Decree 506/2013, with number F0002997/2027.

### Composition

**VIGORHUMUS** is an organic humic amend of a natural origin, prepared from humic lignites, vegetal matter, organic matter and organic extracted seeds, which is a material with a high potential of humic efficiency.

**VIGORHUMUS** is very rich in organic matter (about 57 % s.m.s.), which maintains an ideal chemical and physical soil structure for the development of the cultivation. Its content in humic and fulvic acids of 16% s.m.s. increases the ionic exchange in the soil-plant complex, affecting the cultivation nutrition positively. The value of the C/N relation shows a correct liberation of the nitrogen in the soil, as it is in between 10 and 12. These parameters are shown in the table below:

| PARAMETER           | UNITS    | VALUE   |
|---------------------|----------|---------|
| ORGANIC MATTER      | % s.m.s. | 54 - 60 |
| TOTAL HUMIC EXTRACT | % s.m.s. | 15 -17  |
| HUMIC ACIDS         | % s.m.s. | 6 - 8   |
| FULVIC ACIDS        | % s.m.s. | 3 - 4   |
| C/N RELATION        | -        | 10 - 12 |

In the following table the nutritive richness and other agronomic parameters are shown, from which a slightly basic pH value, a high content in total nitrogen (basically organic) and phosphorus richness (1%) should be pointed out. It is also noteworthy that the product has a low level of heavy metals (type A), and it is a sterilized product, which is shown by the absence of *Salmonella* and the very low levels of *Escherichia*

*coli*. Lastly, it should be highlighted that the granulometry of the product is below 10mm.

| PARAMETER   | s.m.s.    | s.m.f.    |
|---|-----------|-----------|
| MOISTURE (%)  | 0         | 13 -16    |
| pH  | 7,0 - 7,7 | 7,0 - 7,7 |
| ELECTRIC CONDUCTIVITY (CE) (dS/m)                                   | 8,5 - 9,5 | 8,5 - 9,5 |
| Total NITROGEN (N) (%)  | 2,5 - 3,5 | 2,1 - 3,0 |
| Organic NITROGEN (n) (%)  | 2,0 - 2,5 | 1,7 - 2,2 |
| Total PHOSPHORUS PENTOXIDE FÓSFORO (P <sub>2</sub> O <sub>5</sub> ) | 1,4 - 1,6 | 1,2 -1,4  |
| ORGANIC CARBON (C)  | 25 -30    | 20 - 24   |
| HEAVY METALS (Type)   | A         | A         |
| <i>Salmonella</i> (absence/presence in 25g)                         | Absence   | Absence   |
| <i>Escherichia coli</i> (NMP/g)                                     | < 3       | < 3       |
| GRANULOMETRY (90% del producto)                                     | < 10 mm   | < 10 mm   |

### Characteristics

The main characteristics of VIGORHUMUS with agronomic incidence are:

- It increases the soil porosity, which improves its aeration and decreases the compactation. It also helps to increase the drainage.
- Its high content in organic matter, especially in humic form, helps the production of clay-humic additions which allow a higher Cation-exchange Capacity (CEC) of nutrients between the soil and the plant. The humic content makes the product as a buffer, protecting the plants from sudden pH changes.
- It favours the assimilation of phosphorus and micronutrients for the plant.
- Given its high content in organic matter, it favours the porosity, aeration and water circulation in clay soils, while it gives sandy soils structure and cohesion.
- The high concentration in humic extract makes it possible for it to be applied in inferior doses than manure, decreasing the cost of the treatment.
- It reduces the micronutrient blocking that is characteristic in calcareous and poor in organic matter soils



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.

## Application

**VIGORHUMUS** is applied as an organic amendment in agriculture, gardening and green spaces; and it is especially used in fruit farming, horticulture and gardening.

**VIGORHUMUS** is applied by mixing it with the soil you want to cultivate or improve. Its application can be as a base fertiliser or cover fertiliser, the last one is recommended when growing long term cultivations (woody and long length herbaceous).

The recommended application dosages are the ones shown in the table below. It is done after a fast labour of incorporation of the product at a depth of 15-20cm in the soil. The sowing or plantation can be done immediately afterwards.

| TYPE OF CULTIVATION               | VIGORHUMUS DOSAGE (*)    |
|-----------------------------------|--------------------------|
| Fruity, citrus, subtropicals      | 1.600 – 2.000 kg/ha      |
| Vineyard                          | 90 – 110 kg/ha           |
| Olive                             | 50 – 100 kg/árbol        |
| Horticulture and flower gardening | 1.600 – 2.400 kg/ha      |
| Gardening                         | 40 kg/100 m <sup>2</sup> |
| Grass                             | 20 kg/100 m <sup>2</sup> |

*(\*) Dosage calculated for a cultivation depth of 20cm. For superior depths it is necessary to increase the dosage proportionally.*

## Product presentation

**VIGORHUMUS** is presented in a fine dust format, making its immediate incorporation to the soil easier by mixing and homogenizing it with the soil.

It is sold in bulk, "Big Bag" and 25 kg sacks on retraciled european pallet (800 x 1.200 cm).