



*Do not compare us with other substance..., we are willing to explain it to you...
During the last two decades we have designed and developed a specific process
We are producers of the substance*

LignoAmi®

*LignoAmi is a **BIO** evolution of sugar molasses
Short molecular size which does it **more assimilable**
Made by an **enzymatic hydrolysis** with protease*

Organic fertilizer NK
Liquid of vegetal origin
Category 2.5.01

Registered MAPA
nº: **F 0004104/2029**

Registered Organic.
nº: **CAAE 26370**

Liquid Bulk:

- * 25 TM by truck
- * 27 TM Isotank by ship
- * 23.5 TM flexitank by ship
- * 26 TM flexitank by ship
- * 40" Container with 18 IBC export

Origin of the substance

It comes from our vegetal base of Condensed Molasses Soluble processed on an enzymatic hydrolysis to cut the protein chains and extract free peptides and amino acids.

It is an Enzymaticly Hydrolysed CMS

It is a natural product, 100% plant extracts, carefully processed and produced in our factories from Salobreña (province of Granada, Spain).

During its manufacturing phase the product is subjected to works cycles in thermic systems in which ones the substance remains at a temperature of 80 ° C for 4 hours, implicitly producing a "Pasteurization" of the LignoAmi.

Product features: **100% plant origin extract**

Organic acids: **10 %**

Stimulate the activity of the radicular microbiota system.

Full of COOH— groups, they are pH buffers which helps to stabilize the mixture ph.

Natural vegetal betaine: **8 %**

Intervenies in the protection of hydric stress and promotes the proteins synthesis.

Vegetal protein: **8 %**

It allows the growth and development of cellular structures and tissues.

A plant aminogram that has already gone through in a 1st phase of biological digestion, then a 2nd phase of enzymatic hydrolysis, forming easily digestible and short peptides chains, in a balance own of the processed vegetable protein.

Shorts vegetable protein chains, for an easier and faster assimilation.

Fluidifier in mixtures it advantage the assimilation of treatments.

Provides protein and vegetable peptides to radicular and foliar uses.

Orders Management:
(+34) 609 551 559
lignok@vinaza.es



Technical Information:
(+34) 656 487 377
lignok@az-guadalfeo.com

Parameters (ranges in ministerial register)	Specifications
Nitrogen (N) Total	2,0 - 4,0 % w/w
Organic Nitrogen	1,7 - 4,0 % w/w
Potassium Oxide (K ₂ O)	3,0 - 9,0 % w/w
N (total) + P ₂ O ₅ + K ₂ O	6,0 - 13,0 % w/w
Total Organic Matter	35,0 - 45,0 % w/w
Total Organic Carbon	20,3 - 26,1 % w/w
Density	1,2 - 1,3 Kg/liter
pH	3,5 - 6,0
C/N Relation (Organic C / Organic N)	5,1 - 15,0
Hydrosoluble Product (Art. 2.23 del R.D.)	Si
Classification of the Product (annexe V del R.D.)	A
Parameters (complementary data)	Specifications
Total Amino Acids (source: vegetable protein)	8 - 9 % w/w
Free Amino Acids (source: vegetable protein)	2 - 3 % w/w
Asp-0,483 g/100g; Gaba-0,650 g/100g; Glu-5,200 g/100g; Ala-0,620 g/100g; Phe-0,132 g/100g; Gly-0,341 g/100g; Hyp-0,680 g/100g; Ile-0,238 g/100g; Leu-0,250 g/100g; Lys-0,162 g/100g; Pro-0,243 g/100g; Ser-0,322 g/100g; Tyr-0,223 g/100g; Thr-0,140 g/100g; Val-0,282 g/100g;	
Trimethylglycyne / Betaine	8 - 10 % w/w
Crude Protein	16 - 20 % w/w
Organic Acids (Principally Lactic Acid)	8 - 10 % w/w
Sugars (Fructose and non-fermentable reducing substances)	3 - 5 % w/w
Carbohydrates	20 - 22 % w/w
Vitamins of B Group (Principally B3 – B6)	8.000 µg/l
<i>All parameters presented in these characterization sheets are supported by studies carried out in accredited laboratories.</i>	