EUROPOMICE

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ZEOLITE

NATURAL ZEOLITITE CLINOPTILOLITE TYPE

Soil improver for growing substrates

Product allowed in organic farming

COMPOSITION

This is a natural volcanic material with a high and selective cationic exchange property.
Total zeolitic content: ca. 85-90%.
Heavy metals (mg/kg): Arsenic (As) 5.87 - Lead (Pb) 4.10 - Cadmium (Cd) < 0.01 - Mercury (Hg) < 0.01

IDEAL FOR:

- Neutralizing harmful elements, ammonium, heavy metals and organic molecules.
- Absorbing odorous gases, ammonia, hydrogen sulphide, mercaptans.
- Improving the exploitation of fertilizers thereby reducing the quantity to be used.
- The range of dried products is used to absorb and filter industrial oils, for general cleaning of surfaces, as a soft abrasive and as a component in pre-mixed materials in the building industry.
- Lightweight aggregate for mortar and cement-based mixes.
- To be used in addition to cultivation substrates or for soil conditioning.

AVERAGE CHEMICAL ANALYSIS representative sample of the quarry	
SiO_2	61 - 67 %
Al_2O_3	10 - 13,9 %
K_2O	1,38 - 1,84 %
Fe_2O_3	2 - 2,8 %
CaO	2 - 3 %
Na_2O	0,5 - 1,9 %
TiO_2	0,27 - 0,33 %
MgO	1,2 - 1,4 %
MnO	0,04 %
P_2O_5	0,02 - 0,03 %
ZnO	0,01 %
B_2O_3	< 0,01 %
CuO	< 0,01 %
MoO_3	< 0,01 %
C	0,16 %
S	< 0,01 %

PHYSICAL AND CHEMICAL PROPERTIES

- Loss at fire 1050°C *(1922°F)*: 8-10%
- Relative humidity: approximately 10%
- Humidity 105°C *(221°F)*: 14.8%
- Selective Cation Exchange Capacity (C.E.C.): 190-210 mEq/100g (K:15.40; Na:12.48: Mg:50.12; Ca:67.77) - *C.E.C.: 190-210 mEq/0.22lb*
- Reversible dehydration
- High structural crypto-porosity
- pH: 7-8
- Water retention
- Mechanical resistance
- Permeability
- Mineral containing no active limestone and no Free Crystalline Silica.

FUNCTIONAL PROPERTIES

Natural volcanic material with technological properties which are the base of the consolidated and profitable use in:

- **Wastewater purification – phyto-purification**: the concentration of NH_4 in the waste water produced by biological activities, by the disposal of solid urban waste, by industrial activities and the content of pollutants in industrial waste water are drastically reduced by means of dynamic or static treatments with zeolites which have appropriate selective properties in relation to the polluting ion.
- **Agriculture**: by applying the zeolites to agricultural land and to substrates used for garden and flower cultivations in greenhouses results in a marked qualitative and quantitative improvement in production, a reduced use of synthetic fertilizers, irrigation water and pollution of the surface and deep hydrological system.

AVAILABLE TYPES	GRAIN SIZE		LOOSE BULK DENSITY Material at quarry humidity *	
SAND	0 - 3 mm	*6- US Mesh*	850 - 950 Kg/m^3	53.06 - 59.31 lb/ft^3
GRIT	3 - 7 mm	5/16"x6 *US Mesh*	800 - 900 Kg/ m^3	49.94 - 56.19 lb/ft^3
GRIT	7 - 12 mm	1/2"x5/16" *US Mesh*	800 - 900 Kg/m^3	49.94 - 56.19 lb/ft^3
* Average humidity < 20%				

AVAILABLE BULK, IN BAGS (BIG-BAGS) 1,5 m^3 *(53 ft^3)* SIZE AND IN 33 L *(7.26 gal)* BAGS PACKED ON PALLETS (50 bags/each)

This mineral is a natural raw material. All data indicated above are average production values and do not provide any warranty.