

## DRIED PUMICE

### COMPOSTION: NATURALLY EXPANDED AND KILN DRIED ALVEOLAR MAGMATIC MINERAL

PUMICE is the result of the natural extension of effusive magmatic mineral that has generated an alveolar product of remarkable lightness, with high porosity, great water retention, slow release of liquids and high thermal and acoustic insulating properties.

The advantage of having a naturally expanded lightweight product involves maintaining the open cell alveolar structure, a unique feature of the pumice extracted in the Tuscany and Lazio mining area.

The subsequent kiln drying and screening enables a product, DRIED PUMICE, to be obtained that is free from natural humidity and suitable for many fields of application.

### FIELDS OF APPLICATIONS

LIGHTWEIGHT INERT FOR MORTARS AND PREMIXED PRODUCTS	SUPPORT FOR CHEMICAL PRODUCTS
FILTRATION AND ABSORPTION OF INDUSTRIAL OILS AND LIQUIDS	SOFT ABRASIVES
PAINTS AND COATINGS	THERMAL INSULATION AND DEHUMIDIFYING PLASTERS
HAND CLEANER PASTE	DENTISTRY

### PHYSICAL AND CHEMICAL PROPERTIES:

Thermal conductivity:  $\lambda = 0,11 \text{ W/(mK)}$  <sup>(1)</sup>

High thermal and acoustic insulating

Transpiration

Excellent workability

Fire-resistant

Durability

Apparent density: 500 - 750 Kg/m<sup>3</sup>

Residual moisture: < 2 %

### LIQUID ABSORPTION

for 100 g of dried Pumice:

Water approx 100 g

Lubricant oil approx 110 g

Diesel fuel and Gasoline approx 80 g

### Imperial Measurements:

Apparent density: 31.21 - 46.82 lb/ft<sup>3</sup>

Liquid absorption for 0.22 lb of Dried Pumice: approx Water 0.22 lb - Lubricant oil 0.24 lb - Diesel fuel and Gasoline 0.18 lb

### MEDIUM CHEMICAL ANALYSIS

of representative samples of the front quarry

SiO <sub>2</sub>	56,8 % ± 5 %
Al <sub>2</sub> O <sub>3</sub>	18,8 % ± 5 %
K <sub>2</sub> O	8,0 % ± 5 %
Fe <sub>2</sub> O <sub>3</sub>	4,2 % ± 5 %
CaO	4,5 % ± 5 %
Na <sub>2</sub> O	1,9 % ± 5 %
TiO <sub>2</sub>	0,5 % ± 5 %
MgO	1,6 % ± 5 %
P <sub>2</sub> O <sub>5</sub>	0,1 % ± 5 %
MnO	0,1 % ± 5 %
P.F.	3,9 % ± 5 %
pH	7-8

NON-TOXIC PRODUCT: Mineral containing no active limestone and no Free Crystalline Silica

### GRAIN SIZE ANALYSIS:

TYPOLOGY OF DRIED PUMICE <sup>(2)</sup>			
International System of Units		Imperial Measurements	
GRAIN SIZE	SPECIFIC WEIGHT	Particle size distribution	SPECIFIC WEIGHT
0 - 200 µm	550 - 600 kg/m <sup>3</sup>	70-	34.34 - 37.46 lb/ft <sup>3</sup>
200 - 850 µm	700 - 750 kg/m <sup>3</sup>	20 x 70	43.70 - 46.82 lb/ft <sup>3</sup>
850 - 3.000 µm	500 - 550 kg/m <sup>3</sup>	7 x 20	31.21 - 34.34 lb/ft <sup>3</sup>

AVAILABLE BULK, in BIG-BAGS of 550-750-1050 kg (1213-1653-2315 lb), in BAGS of 12-15-20 kg (26.46-33.07-44.09 lb) on pallets

STORAGE: store the product in a sheltered and dry place

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

<sup>(1)</sup> Certificated by Politecnico of Torino n. 1447/04

<sup>(2)</sup> The specific weight is indicative and is referring to average values in batches of industrial production. Possible variations are a result of potential phenomena of segregation between the fine and gross parts.