

TECHNICAL DATA SHEET

POZZOLAN 0-75 μ m

DESCRIPTION

Pozzolan is an inorganic material with properties similar to those of cement (hydraulic properties).

Ground pozzolan, mixed with lime and water, creates a type of cement. This happens because in the presence of lime and water, the silicate and alumina react to form hydraulic compounds, just like in cement. Of course, for this to happen, the pozzolan must be ground and not simply sieved into a powder.

It does not contain chlorides or other substances that may attack the reinforcements. For this reason, it is suitable for use in reinforced and prestressed concrete.

Origin: Greece.

APPLICATION AREAS

In fresh form: In fresh mortars that have a tendency to exudate or demix, it is known that the introduction of fine particles improves workability, reducing the size and volume of voids. The finer the particle size of the added material, the less percentage is required to improve the consistency and workability of the fresh mortar.

In hardened form: The use of pozzolan as a component of lime mortars or cement-lime mortars contributes to the binding of the released calcium oxide during the hydration of the cement, to the reduction of porosity, to the avoidance of the release of water and the destruction of the mortar by frost, thus contributing to the long service life of the mortars, which is confirmed by the surviving technical works of antiquity.

The slow pozzolanic reaction makes it possible to reduce the rate of increase in the temperature of the hardened mortar (the maximum temperature of a mass construction is reached in 3 days from its casting) in a proportion proportional to the addition of the pozzolan and makes it particularly resistant to cracking (due to thermal expansion). In addition, as mentioned, the pozzolanic reaction

leads to a reduction in porosity, with a significant improvement in chemical resistance. Permeability plays a key role in determining the rate of destruction due to chemical actions, such as expansion due to alkali silicate reaction and attack by acidic and sulfate environments.

STORAGE

The product must be stored in a clean, dry, and moisture-protected storage area.

NOTICE

The technical information and instructions provided in this datasheet referring to the application and end use of PROLAT products are based on the company's expertise and experience with the products to date. They are provided in good faith under the condition that the products are stored, used, and applied in accordance with PROLAT's instructions. However, given our inability to directly oversee conditions at construction sites or during product application, the company cannot guarantee the suitability of its products for specific purposes, nor does it assume any legal responsibility based on the information provided in this brochure, whether written, oral, or otherwise communicated. Users are advised to conduct a small test to assess the suitability of the products for their intended application and purpose of use. The company reserves the right to modify the properties of its products without prior notice.

PACKAGING

Paper bag of 15kg

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CHEMICAL ANALYSIS		PHYSICAL CHARACTERISTICS	
SiO ₂	72.0-75.5%	Grain size	D90 \approx 75 μ m
Al ₂ O ₃	12.5-13.8%	d90	72 μ m
Na ₂ O	3.8-4.2%	d80	51 μ m
K ₂ O	3.3-4.7%	d50	32 μ m
CaO	0.8-1.5%	d30	21 μ m
MgO	0.4-0.7%	d20	15 μ m
Fe ₂ O ₃	0.5-1.1	d10	5 μ m
LOI	2.2-2.9%	density (bulk)	800 \pm 100kg/m ³
		Moisture	0.4% max