



POMICAL FOR STRUCTURAL USE 28

MIXTURE OF LIGHTWEIGHT AGGREGATES FOR CLS STRUCTURAL

Europomice identified in PUMICE and LAPILLUS products able to meet the new needs of the construction industry: **lightness, absence of silica free, high thermal and sound insulation, fluid retention**, make these volcanic aggregates of efficient substitutes for polystyrene, expanded clays and other similar materials.

Pomical for Structural Use 28 among other does not requires machining prior to use and maintains high characteristics of pumpability and workability, even in extreme conditions.

COMPOSITION:

POMICAL FOR STRUCTUR USE 28 is a *mixture of alveolar volcanic aggregates of remarkable lightness and great isolating properties* resulting from natural extensions of effusive magmatic minerals) in granulometric curves of 3/10 mm. for the production of lighter thermo insulating and soundproof structural concrete at low specific weight and easy pumping.

It is a non-toxic product (Silica Free).

PHYSICAL PROPERTIES	
COLOR	Red amber /brown
GRAINS FORM	Polyhedral
GRAIN SIZE	3-10 mm.
RESISTANT AGAINST FRAGMENTATION/CRASHING	1,61 N/mm ²
TOTAL WATER CONTENT	12,8%
WATER ABSORPTION	13,1%
SPECIFIC WEIGHT IN PILE	0,86 Mg/m ³
SPECIFIC WEIGHT DRY SATURATED SURFACE	1,88 Mg/m ³ + 5%
TEMPERATURE RESISTANT	1140 °C - 1150 °C

CHEMICAL PROPERTIES	
ALKAL-SILICA REACTIVITY (average expansion % after 90 days)	0,0276% (not reactive)
CHLORIDES	< 0,001%
SOLUBLE SULPHATES IN ACID	< 0,05%
TOTAL SULFUR	< 0,04%
CONTENT DETERMINATION OF HUMIC/SUBSTANCE	Absent
RADIOACTIVITY EMISSION	NDP
HEAVY METALS EMISSION	NPD
POLYAROMATIC HYDROCARBONS EMISSION	NDP
OTHER DANGEROUS SUBSTANCES EMISSION	NDP
NON-TOXIC PRODUCT (Silica Free)	

Using POMICAL FOR STRUCTURAL USE 28, cement, water and any additives, an OPTIMIZED CONCRETE is obtained with following properties:

LIGHTNESS	Dry density less than 2000 Kg/m ³
RESISTANT AGAINST COMPRESSION	RCK approx. 28 N/mm ²
THERMAL INSULATION	Good thermal insulation
SOUND INSULATION	Good sound insulation
TRANSPIRABILITY	$\mu=4$ ⁽¹⁾
EXCELLENT WORKABILITY	
FIRE-RESISTANT	
EXTREMELY EASY PUMPING	
BLEEDING ABSENCE	
DURABILITY	
ENVIRONMENTALLY FRIENDLY	
EXCELLENT VISUAL APPEARANCE OF THE SURFACE	

WORDING PROPOSED

Resistance Class (N/mm ²)	Minimum cement dosage 42,5 (kg/m ³)	Water cement ratio	Specific weight (kg/m ³)	Specific weight hardened concrete (kg/m ³)	Sand percentage 0-6 mm.
25/28	450	0,48	1899	1766	10%

N.B. All proposed formulations must be pre-tested by a qualified laboratory. Any variations in dosages can alter the final characteristics of the product.

AVAILABLE BULK, in BIG-BAGS of 1,5 m³ (53 cu ft), in BAGS of 33 lt. (7.26 gal) on pallets of 55 bags/each.

THE AVERAGE LOAD VOLUME FOR COMPLETE LOADS IS ABOUT 31 MC.

This mineral is a natural raw material. All data indicated above are therefore approximate and do not provide any warranty.

(1) Certificated by Politecnico of Torino n. 1470 from the 08/06/2004