

1. DESCRIPTION

Leca® S is a non-combustible expanded clay granulate with a dimension of 1 to 5 mm obtained by processing natural materials for use in concrete, prefabrication and mortars in buildings, roads and civil engineering works.

2. STORAGE

Material handling during transport and storage can influence its characteristics. Eg segregation, breakage or water absorption may occur, which may influence some characteristics of the shipped material. Humidity on delivery varies with weather conditions.

3. APPLICATION AREA

Lightweight mortars and concretes, refractory mortars, creation of slopes; lightweight filler concrete; pipe protection; prefabrication; agriculture and floriculture.

4. PACKAGING

bulk

Unisack with 3 m³

Unisack 1.5 m³

50 l bag

5. GRANULOMETRIC CURVE (NP EN 933-1)

The curve and values presented at this point refer to 185 tests carried out on 2220 samples collected during 2019 and should not be considered as a general specification of the material in question.

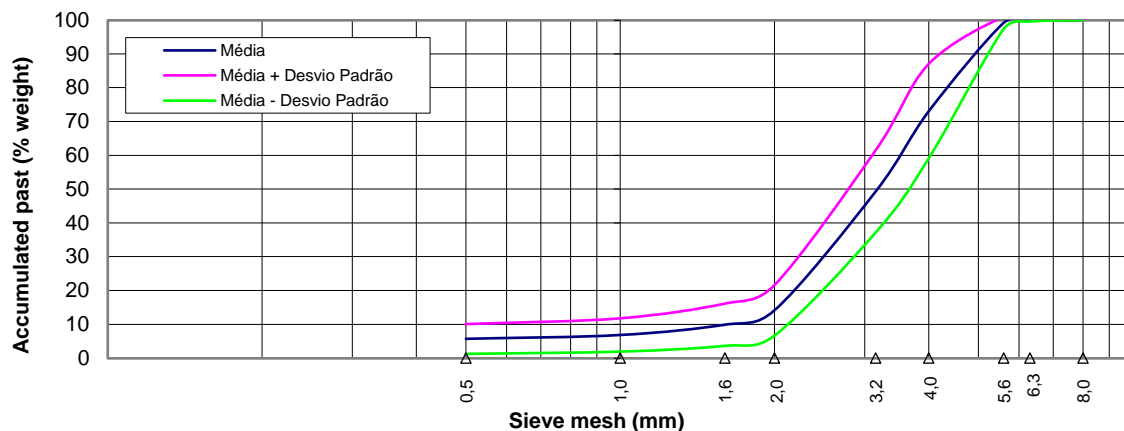


TABLE 1. granulometric curve

Sieve mesh [mm]	0.50	1.00	1.60	2.00	3.15	4.00	5.60	6.30	8.00
Average accumulated past [% weight]	6	7	10	14	49	73	99	100	100
Max. Declared value	15								
mini. Declared value							90		
d ₅₀ ± Standard Deviation					3.2 ± 0.4				

6. PHYSICOCHEMICAL PROPERTIES

Table 2. Physical-chemical characteristics of the product

PROPERTY	DECLARED VALUE
Particle shape of Leca® aggregate	approximately spherical
reaction to fire	Euroclass A1 (non-combustible)
Crush resistance of Leca® aggregate	≥ 1.8 MPa , according to NP EN 13055-1
Percentage of crushed particles	≤25% of the mass, according to NP EN 933-5
Apparent dry density	430 Kg/m ³ ± 15%, according to NP EN 1097-3
Particle density	650 kg /m ³ ± 15%, according to NP EN 1097-6
Water absorption after 24h immersion	< 38% of its dry mass, according to NP EN 1097-6
Sound resistance (air sounds R) ¹	35 dB
hygroscopic moisture	non-hygroscopic material
Chloride content (Cl)	< 0.1%
Acid-soluble sulfate (SO ₃)	< 0.4%
Sulfur content (S)	<0.2%
pH	9-10

7. RECOMMENDATIONS FOR APPLICATION

Leca® S can be applied loose or bonded with a hydraulic binder (in the case of mortars and lightweight concrete). In this case, the water must be mixed in two stages: first, mix the Leca® S with 2/3 of the water for 1-2 min and only then add the cement and the remaining water, mixing for about 3-4 min.

For more information, consult the Declaration of Performance of the product according to EN 14 063-1:2014/AC:2006

The product information contained in this Data Sheet is presented in good faith and is based on accumulated experience and knowledge in typical usage situations. The conditions of application and use may influence the behavior of the product, so it is advisable to carry out checks and tests in each specific situation.