



2002
PERLINDUSTRIA

Technical Data Sheet

Perlite V-13

Perlite is an amorphous volcanic glass that has relatively high water content. It is a mineral that appears in nature, and has the rare property of expanding very much when heated sufficiently.

When it reaches temperatures of 850-900 ° C, the perlite softens. Water trapped in the structure of the material escapes and vaporizes, causing its expansion. The expanded material is a bright white colour, due to the reflectivity of the trapped bubbles.

The expanded perlite, after going through a crushing process, is transformed into a filter whose particles form a non-compressible cake, with 85% of hollow spaces to filter the liquids, being retained in the cake the solid elements in suspension including the ones with the smallest sizes.

Physical properties

Colour	White
Bulk density	70-130 kg/m ³ (according PLAB 0701)
Compacted density	80-150 kg/m ³ (according PLAB 0702)
Melting temperature	1260 - 1350 ° C
Softening temperature	1150 – 1250 ° C
PH (in water)	7-10 (according PLAB 0705)
Relative humidity	< 2 % (according PLAB 0713)
Calcination	< 2 % (according PLAB 0718)
Not Floating	< 25 % (according PLAB 0741)
Thermal conductivity	≤ 0.04 W/mK a 20 °C
Specific heat	0.84 kJ/kgK
Combustibility	Non combustible
Asbestos	Asbestos Free

Applications

- Aeration and regulation of water in organic substrates.
- Hydroponics.
- Manufacture of plaster and light mortars
- Products for passive fire protection (mortars and panels).
- Textile washing.
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Packaging and conservation

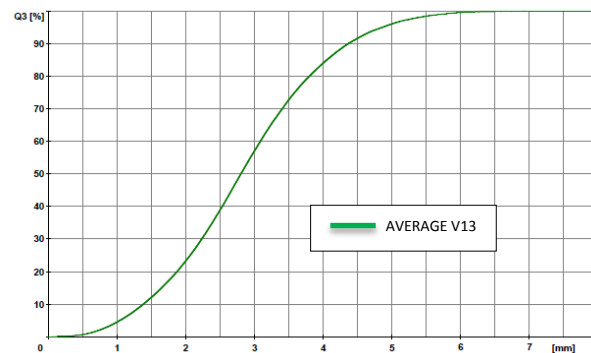
It can be packed in bags with 36 bags per pallet, big bags with 3 big bags per pallet and tanker truck.

Keep the original packaging in a cool and dry place.

Particle size

Sieve (µm)	% retained (vol.)
5000	< 20 %
3150	10-60 %
1400	30-75 %
600	< 25 %
0	< 5 %

*According PLAB 0749.



Average particle size: From 1 to 4.5 mm (reference value)

Features

% Intern (vol.)	Average size (reference value)
10	1400 µm
50	2800 µm
90	4400 µm

Chemical composition

SiO ₂	70-80 %
Al ₂ O ₃	12-16 %
Na ₂ O	2-5 %
K ₂ O	2-5 %
CaO	0-2 %
MgO	0-1 %
Fe ₂ O ₃	0-1 %
H ₂ O (combined water)	<1 %