



2002
PERLINDUSTRIA

Technical Data Sheet

Perlite V-12

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 of microscopic size.

Physical properties

Colour	White
Bulk Density	45-85 kg/m ³ (according to PLAB 0701)
Compacted Density	50-105 kg/m ³ (according to PLAB 0702)
Melting temperature	1260 - 1350 °C
Softening temperature	1150 – 1250 °C
PH (in water)	7-10 (according to PLAB 0705)
Refraction Index	1.5
Relative humidity	< 2 % (according to PLAB 0713)
Calcination	< 2 % (according to PLAB 0718)
Non-floating	< 20 % (according to 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 protection (mortars and plates).
- Textile washing.

Packaging and conservation

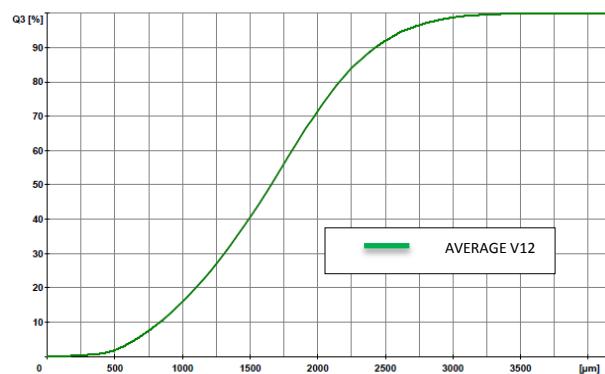
It can be packed in bags with 36 bags per pallet, big bags with 3 big bags per pallet and tanker truck.

Keep the original packaging in a cool and dry place.

Particle size

Sieve (µm)	% retained (vol.)
3150	< 5 %
1400	40-80 %
600	20-50 %
300	< 10 %
150	< 3 %
0	< 2 %

* According to PLAB 0749.



Average particle size: From 1 a 3 mm (reference value)

Features

% Intern (vol.)	Average size (reference value)
10	825 µm
50	1650 µm
90	2400 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 %