

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.

### Physical properties

<b>Colour</b>	White
<b>Bulk density</b>	70-130 kg/m <sup>3</sup> (according PLAB 0701)
<b>Compacted density</b>	80-150 kg/m <sup>3</sup> (according PLAB 0702)
<b>Melting temperature</b>	1260 - 1350 ° C
<b>Softening temperature</b>	1150 – 1250 ° C
<b>PH (in water)</b>	7-10 (according PLAB 0705)
<b>Relative humidity</b>	< 2 % (according PLAB 0713)
<b>Calcination</b>	< 2 % (according PLAB 0718)
<b>Not Floating (V)</b>	< 4 % (according PLAB 0741)
<b>Thermal conductivity</b>	≤ 0.04 W/mK a 20 °C
<b>Specific heat</b>	0.84 kJ/kgK
<b>Combustibility</b>	Non combustible
<b>Asbestos</b>	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.

### Packaging and conservation

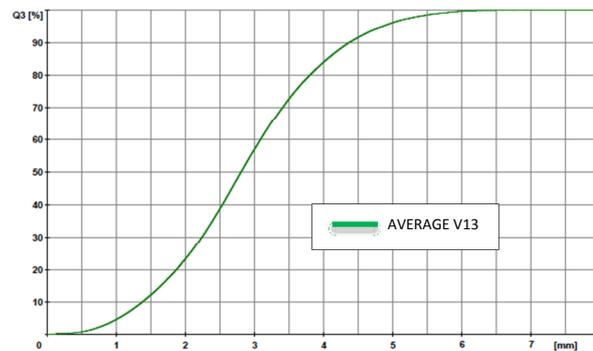
It can be packed in bags with 36 bags per pallet, big bags with 3 big bags per pallet and tanker truck.

Keep the original packaging in a cool and dry place.

### Particle size

Sieve (µm)	% retained (vol.)
5000	< 35 %
3150	5-70 %
1400	10-85 %
600	< 40 %
0	< 10 %

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

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