

2002  
PERLINDUSTRIA

# Technical Data Sheet

## Perlite V-10F

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>	40-80 kg/m <sup>3</sup> (according to PLAB 0701)
<b>Compacted Density</b>	50-100 kg/m <sup>3</sup> (according to PLAB 0702)
<b>Melting temperature</b>	1260 - 1350° C
<b>Softening temperature</b>	1150 – 1250° C
<b>pH (in water)</b>	7-10 (according to PLAB 0705)
<b>Refraction Index</b>	1.5
<b>Relative humidity</b>	<2 % (according to PLAB 0713)
<b>Calcination</b>	<5 % (according to PLAB 0718)
<b>Non-floating (V)</b>	<5 % (according to PLAB 0741)
<b>Thermal Conductivity</b>	≤ 0.04 W/mK to 20 °C
<b>Specific heat</b>	0.84 kJ/kgK
<b>Combustibility</b>	Non-combustible
<b>Asbestos</b>	Asbestos free

### Applications

- Manufacture of plaster and lightened mortars.
- Products for passive protection (mortars and plates)
- Textile washing.
- Manufacture of refractory products.

### Packaging and conservation

The Perlite can be packaged in 100 litter bags, containing each pallet 36 bags. It can also be packed in big bags, containing each pallet 3 big bags. Moreover, it can also be sold by with tank truck

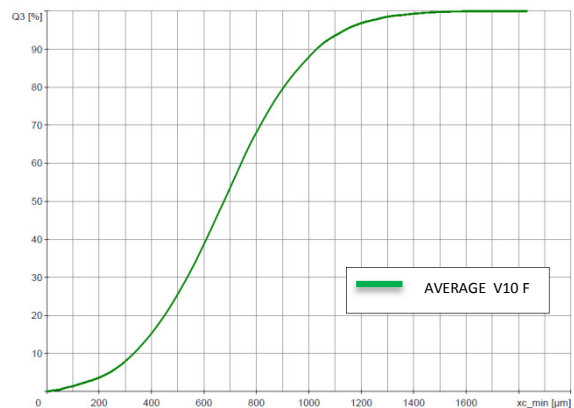
Keep the original packaging in a cool and dry place.

REV 02. NOVEMBER 2020

### Particle size

Sieve (µm)	% retained (vol.)
2000	<2 %
1400	<20 %
600	50-80 %
300	10-35 %
150	<10 %
40	<10 %
0	<2 %

\* According to PLAB 0749.



Average particle size: From 0.15 to 1.8 mm (reference value)

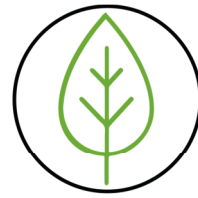
### Features

% Intern (vol.)	Average size (reference value)
10	350 µm
50	700 µm
90	1050 µm

### Chemical composition

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





2002  
PERLINDUSTRIA



2002 Perindustria S.L.U. © 2019  
Garraf, s/n. Pol. Ind. Can Prunera  
08759 Vallirana, Barcelona

Email: [info@perlindustria.com](mailto:info@perlindustria.com)  
Web: [www.perlindustria.com](http://www.perlindustria.com)  
Phone: +34 93 683 44 00