

2002  
PERLINDUSTRIA

# Technical Data Sheet

## Perlite V6

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>	35-55 kg/m <sup>3</sup> (according PLAB 0701)
<b>Compacted Density</b>	45-80 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>Non-floating (weight)</b>	<10 % (according PLAB 0741)
<b>Non-floating (volume)</b>	<2 % (according PLAB 0741)
<b>Relative humidity</b>	<3 % (according PLAB 0713)
<b>Calcination</b>	<3 % (according PLAB 0718)
<b>Refraction Index</b>	1.5
<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

- Cryogenics. LNG tanks insulation.
- Manufacture of plaster and lightened mortars.
- Products for passive protection (mortars and plates)
- Textile washing.

### Packaging and conservation

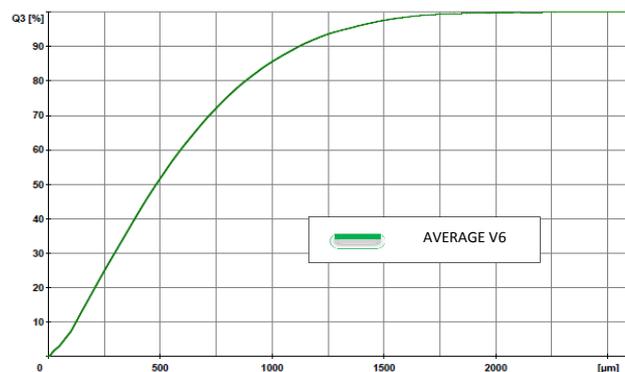
The Perlite can be packaged in 125 litter bags, containing each pallet 26 bags. It can also be packed in big bags, containing each pallet 3 big bags. Moreover, it can also be sold by with tank truck.

Keep the original packaging in a cool and dry place.

### Granulometry

Sieve (µm)	% retained (vol.)
1400	< 20 %
600	5-55 %
300	20-55 %
150	5-35 %
40	< 15 %
0	< 5 %

\*According to PLAB 0749.



Average particle: From 0 a 1.5 mm (reference value)

### Features

% Intern (vol.)	Average size (reference value)
10	125 µm
50	500 µm
90	1120 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 %

REV2. NOVIEMBRE 2020



2002 Perlindustria 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