Technical Data Sheet
Perlite V-12

Description

Perlite is an amorphous volcanic glass that has relatively high water content. It's a mineral that occurs in nature and has the unusual property of greatly expand when it's heated.

When perlite reaches temperatures of 850-900 ° C, perlite softens (because it is a glass). Water trapped in the structure of the material is vaporized and escapes, and this causes the expansion of the material up to 20 times its original volume. The expanded material is a bright white, due to the reflectivity of the trapped bubbles.

Physical properties

- Color: White
- Loose Density: 50-80 kg/m^3 (according PI 200-77)
- Compacted Density: 60-100 kg/m^3 (according PI 200-77)
- pH (in water): 7-10 (according PI 202-77)
- Sieve Analysis

Mesh (µm)	% retained
3150	< 5 %
1400	40-60 %
600	10-30 %
300	5-15 %
150	5-10 %
Dust	< 20 %

- Free Moisture: <2 % (according PI 118-77)
- Loss on Ignition: <1 % (according PI 118-77)
- Refractive Index: 1.5
- Softening Temperature: 1150-1250 ºC
- Melting Temperature: 1260-1350 ºC
- Thermal Conductivity: ≤ 0.04 W/mK a 20 ºC (according ASTM 177)
- Heat Specific: 0.84 kJ/kgK
- Combustibility: Non combustible
- Asbestos: Asbestos Free

Chemical Properties

Chemical Composition	
SiO_2	70-80 %
Al_2O_3	12-16 %
Na_2O	2-5 %
K_2O	2-5 %
CaO	0-2 %
MgO	0-1 %
Fe_2O_3	0-1 %
H_2O (combined water)	<1 %

Packaging

Perlite is packed in bags of 100 liters, with 36 bags for pallet. It also can be packed by big bags or tanker.

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