

1. PRODUCT DESCRIPTION

PERLITE is a volcanic glass which occurs in nature, with a quite high water content.

The distinguishing feature from other volcanic rock is that when heated to a suitable point in its softening range, it expands from four to twenty times its original volume. The expansion is due to the presence of 2-6 % combined water in the crude perlite rock. When quickly heated to above 871 °C, the crude rock pops in a manner similar to popcorn as the combined water vaporizes and creates countless tiny bubbles which account for the amazing light weight and other exceptional physical properties of expanded perlite.

The expansion process also creates one of perlite's most distinguishing characteristics: its white colour.

2. PHYSICAL PROPERTIES

Colour.....	White	
Bulk density.....	50 – 80	Kg/m ³
Tamped density.....	60 – 100	Kg/m ³
pH (in water).....	7 – 10	
Moisture.....	< 2	%
Loss on ignition.....	< 1	%
Refractive Index.....	1.5	
Softening temperatura.....	1150 – 1250	°C
Melting temperatura.....	1260 – 1350	°C
Thermal conductivity.....	≤ 0.04	W/m·K
Specific heat.....	0.84	kJ/kg·K
Flammability.....	No flammable	
Asbestos.....	Free	

3. CHEMICAL ANALYSIS

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	%
Bound water.....	< 1	%

4. PRODUCT PRESENTATION

PERLITE is supplied in paper sacks of 100 litres (36 sacks per pallet), big-bags or tank truck.

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Revision:

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Date of issue:

21/04/2015