



Medium grade expanded perlite. Natural, non-toxic, inert, lightweight, thermoinsulating, non combustible product obtained by a thermal expansion process of a specific variety of effusive volcanic rock.

The use of particular raw materials originally selected and the thermal expansion process with methane burners allow to get an inorganic product, stable and chemically inert.

After expansion Peralit 20 MK1 is placed in plastic bags or in big-bags.

Peralit 20 MK1 can withstand biological attacks and will not deteriorate or rot even after long storage periods.

Special treatments

On request, Peralit 20 MK1 can be heat treated with polymers in an aqueous solution, thus offering excellent water repellency performance and greatly reducing water absorption capacity and moisture retention.

Chemical-physical characteristics

Aspect	solid granular
Particle size	1 ÷ 3 mm
Loose bulk density	95 ± 20 kg/m ³
Compacted bulk density	110 ± 25 kg/m ³
Color	white
Thermal conductivity CE	0,050 W/mK
λ_{mean} at +20 °C	Test report 0010-B/DC/TTS/06 - Certificate of Conformity 0497/674/06 Lab. Istituto di Certificazione CSI - Bollate (Italy)
Reaction to fire	Class A1 – non combustible
Specific heat	837 J/Kg°K
Melting point	1.200°C
pH	6,5 ÷ 7,5
Solubility	<ul style="list-style-type: none"> • insoluble in water, organic and mineral acids at low and high temperature • soluble in strong alkali, in according to the temperature and time of contact and in hydrofluoric acid

PERALIT 20 MK1 SILICONATO (WATERPROOF)

Thermal conductivity CE	0,046 W/mK
λ_{mean} at +20 °C	Test report 0067-B/DEU/CPD/06 - Certificate of Conformity 0497/678/06 Lab. Istituto di Certificazione CSI - Bollate (Italy)
Water repellency	WR ≥175 ml (UNI EN 14316-1 – App. E)

Raw material chemical composition

Silicon	SiO ₂	74 ÷ 78%
Aluminum Oxide	Al ₂ O ₃	11 ÷ 14%
Iron Oxide	Fe ₂ O ₃	0,5 ÷ 1,5%
Sodium Oxide	Na ₂ O	3 ÷ 6%
Potassium Oxide	K ₂ O	2 ÷ 4%
Calcium Oxide	CaO	1 ÷ 2%
Magnesium Oxide	MgO	0 ÷ 0,5%

Particle size distribution

2,8 mm sieve	1 ÷ 15%
2,0 mm sieve	5 ÷ 40%
1,0 mm sieve	30 ÷ 80%
0,5 mm sieve	5 ÷ 20%
0,25 mm sieve	1 ÷ 10%
Sieve residue < 0,25 mm	1 ÷ 15%

Packing, storage and shelf life

Packaging

- plastic bags of 100 or 80 liters and paper bags 80 liters, measured in loose bulk (uncompacted).
- big cloth bags of 3 m³ (1 m³ on request)
- in bulk, loaded on tank trucks

Storage

Protect from frost and moisture

Shelf life

Peralit 20 MK1 has no expire date and presents a very good storage stability.

CE mark

Peralit 20 MK1 e Peralit 20 MK1 Waterproof are CE marked following the norms UNI EN 13055-1:2003 "Lightweight aggregates for concrete and plasters" and UNI EN 14316-1:2005 "In-situ thermal insulation formed from expanded perlite (EP) products", as indicated in the European Construction Products Directive 89/106/CEE, adopted in Italy with D.P.R. 246/1993.

Quality

Peralit 20 MK1 is produced under a quality system and all the activities, which have a bearing upon quality, are set out in written procedures, in accordance with EN ISO 9001:2008.

Test equipments and all materials are subjected to systematic and regular checks.

January 2011



The purpose information of this data sheet is to provide about uses and applying method of the material. The information given in this data sheet is based on actual tests and is believed to be typical of the product. They must be properly verify by the user in relation to his needs and specific application.

No guarantee of results is implied however, since conditions of use are beyond our control. Perlite Italiana reserves the right to make changes at any time.