

Technical Data Sheet

GWE GeoTherm[®] Light



Product description:

Sealing grout with adequate thermal conductivity to produce waterproof sealings for the embedding of geothermal probes.



Product characteristics:

Sealings made of GWE GeoTherm[®] Light are stable against freeze-thaw stresses. Furthermore any perforated impermeable layer will be tightly sealed as the grout shows a very low permeability of 1×10^{-10} m/s. GWE GeoTherm[®] Light slurries are showing optimized flow properties which secure a complete discharge of drilling fluid during the grouting process. Because of high slurry stability, no settlement of suspended fines will occur so that the probe becomes embedded completely. The high compressive strength of the grout improves the static reliability of the probe. As the grout hardening without shrinkage, the probe is well interconnected to the surrounded sediments.

Dosage:

<u>Yield</u>			<u>Per 25 kg bag</u>		
820	kg	GeoTherm [®] Light	25	kg	GeoTherm [®] Light
+ 660	l	water	+ 20	l	water
= 1000	l	slurry	= 30	l	slurry

Characteristics of the sealing:

Water-solid ratio	0,8	
Thermal conductivity:	ca. 1	W(m K)
Marsh time:	> 60	s
Density:	1,48	g/cm ³
Compressive strength (7 d):	3,0	N/mm ²
Compressive strength (28 d):	6,0	N/mm ²
Coefficient of permeability k_f :	1×10^{-10}	m/s
Processing time:	5	h

Form of delivery:

GWE GeoTherm[®] Light is available in 25 kg in paper bags