Fibre-reinforced
Geosynthetic Clay Liner (GBR-C)

CE
0799-CPR-20

Bentofix® NSP 6000

Bentofix® NSP 6000 is a shear strength transmitting geosynthetic clay barrier (GBR-C), continuously needle-punched through all components. A GBR-C is also known as geosynthetic clay liner (GCL) or bentonite mat. Additional bentonite powder is impregnated into a 500 mm overlapping area on both longitudinal sides of the cover layer. The 300 mm length longitudinal overlapping areas are marked on the carrier layer.

Property	**Test method***	**Unit**	**Value**
Geotextile layers:			
Cover layer (polypropylene nonvowen):			
Mass per unit area	EN ISO 9864	g/m²	≥ 200
Carrier layer (polypropylene woven):			
Mass per unit area	EN ISO 9864	g/m²	≥ 100
Bentonite layer (sodium bentonite powder):			
Mass per unit area	EN 14196 (ρ_{CLAY})	g/m²	5,700
Swell index	ASTM D5890	ml/2g	≥ 24
Fluid Loss	ASTM D5891	ml	≤ 18
Water content	ISO 11465 (5hrs, 105 °C)	%	approx. 10
Geosynthetic Clay Liner:			
Mass per unit area	EN 14196 (ρ_{GBR-C})	g/m²	6,030
Thickness	EN ISO 9863-1	mm	7.5
Tensile strength, md/cmd**	EN ISO 10319 / ASTM D6768	kN/m	12.0 / 12.0
Elongation at max. strength, md/cmd**	EN ISO 10319 / ASTM D6768	%	10.0 / 6.0
Peel strength	ASTM D6496	N/10 cm*** N/m	≥ 60 ≥ 360
Static puncture	EN ISO 12236 / ASTM D6241	N	2,000
Hydraulic Conductivity (k_{10})	EN 16416 / ASTM D5887	m/s	1.2×10^{-11}
Permittivity (Ψ_{10})	EN 16416 / ASTM D5887	1/s	1.6×10^{-9}
Index Flux (q_{10})	EN 16416 / ASTM D5887	(m³/m²)/s	2.4×10^{-9}
Roll dimensions:			
width x length, / diameter (approx.)	-	m x m / m	5.00 x 40 / 0.60

** = based on; **md = machine direction, cmd = cross machine direction; ***max. peak*

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The listed technical values are guiding values, achieved in our laboratories and/or independent testing institutes. Our products are subject to changes without prior notice.