

Fibre-reinforced Geosynthetic Clay Liner (GCL)

Bentofix® NSP 4900



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The following table lists properties of **Bentofix® NSP 4900**, a shear strength transmitting geosynthetic clay liner, continuously needle-punched through all components. Additional bentonite powder is impregnated into a 50 cm overlapping area on both longitudinal sides of the cover layer. The top side is visually marked by the roll imprint "Bentofix®". The 30 cm longitudinal overlapping area is marked on the bottom side.

Property	Test Method*	Unit	
Geotextile layers:			
Cover layer			
Geotextile type			polypropylene nonwoven
Mass per unit area	EN 965	g/m ²	220
Carrier layer			
Geotextile type			polypropylene woven
Mass per unit area	EN 965	g/m ²	110
Bentonite layer:			
Type			natural sodium bentonite (powder)
Mass per unit area	EN 965	g/m ²	4,670
Swell Index	ASTM D 5890	ml/2g	24
Fluid Loss	ASTM D 5891	ml	≤18
Water Content	DIN 18121 (5 hrs, 105 °C)	%	approx. 10
Geosynthetic Clay Liner:			
Mass per unit area	EN 965	g/m ²	5,000
Thickness	EN 964-1	mm	6.0
Max. tensile strength, md/cmd**	EN ISO 10319 ASTM D 4595	kN/m	12.0 / 12.0
Elongation at break, md/cmd**	EN ISO 10319 ASTM D 4595	%	10.0 / 6.0
Peel strength	EN ISO 10319	N/10 cm	≥ 60
Peel strength	ASTM D 6496	N/m	≥ 360
Permeability/ Hydraulic Conductivity	DIN 18130 / ASTM-D-5887	m/s	2 x 10 ⁻¹¹
Index Flux	DIN 18130 / ASTM-D-5887	(m ³ /m ²)/s	5 x 10 ⁻⁹
Roll dimensions:			
width x length, diameter	-	m x m / m	4.85 x 40 / Ø 0.65

* = based on; **md = machine direction, cmd = cross machine direction

The a. m. technical values are average values over the roll width. These data are guiding values achieved in our laboratories and/or independent testing institutes. Our products can be subject to changes without prior notice.