




## Technical Data Sheet

Product : GCL - 5000N



Waterproofing Dep.

Property	Test Method***	Unit	Values
Cover layer (polypropylene nonwoven filled with bentonite):			
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	300
Carrier layer (polypropylene woven):			
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	200
Bentonite layer (sodium bentonite powder):			
Mass per unit area**	EN 14196 (ρ CBR-C)	g/m <sup>2</sup>	4200+800
Swell index	ASTM D5890	ml/2g	24
Fluid Loss	ASTM D5891	ml	≤18
Water content	DIN 18121 / ISO 11465 (5hrs,105°C)	%	approx. 10
Geosynthetic Clay Liner:			
Mass per unit area	EN 14196 (ρ CBR-C)	g/m <sup>2</sup>	5500
Thickness	EN ISO 9863-1	mm	7.0
Max. tensile strength, md/cmd*	EN ISO 10319 ASTM D4632	N/m N	20.0 / 11.0 500 / 270
Puncture force	EN ISO 12236 ASTM D4833	N N	2500 1000
Peel strength	ASTM D6496	N/10cm****	≤60
		N/m	≤360
Peel adhesion to concrete	ASTM D903	lbs/in	6.1
Permeability Hydraulic Conductivity (k10)	EN 16416 / ASTM D5887 + ASTM D5084	m/s	at 30kPa: 2 x 10 <sup>-11</sup> at 100kPa: 2 x 10 <sup>-11</sup> at 200kPa: 2 x 10 <sup>-12</sup> at 300kPa: 2 x 10 <sup>-12</sup>
* md = machine direction, cmd = cross machine direction, ** including bentonite in the face of the membrane, ***based on (where DIN or EN test methods are quoted, they are used for QC testing), ****max. peak			
Certificate	  		
MAIN ADVANTAGES	versatile sealing applications with different GCL types and sodium bentonite can reduce construction costs by replacing compacted clay quick and easy to install		
Usage Application	waste and contaminated soil caps, landfill base liners, gas and vapour seals, groundwater protection, waterproofing		
Category According to BS 8102 (2009)	Type A <input checked="" type="checkbox"/>	Type B <input type="checkbox"/>	Type C <input type="checkbox"/>

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