Technical Data Sheet

Product: GCL - 5000N

Date Revised: 4/25/2018

Sepanta group
Waterproofing Dep.

Geosynthetic Clay Liner

Property	Test Method***	Unit	Values
Geotextile layers:			
Cover layer (polypropylene nonwoven filled with bentonite):			
Mass per unit area	EN ISO 9864	g/m^2	300
Carrier layer (polypropylene woven):			
Mass per unit area	EN ISO 9864	g/m^2	200
Bentonite layer (sodium bentonite powder):			
Mass per unit area**	EN 14196 (ρ_{CLAY})	g/m^2	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/m2	5500
Thickness	EN ISO 9863-1	mm	7.0
Max. tensile strength, md/cmd*	EN ISO 10319 ASTM D4632	kN/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 (k^{10})	EN 16416 / ASTM D5887 + ASTM D5084	m/s	at 30kPa: 2×10^{-11} at 100kPa: 8×10^{-11} at 200 kPa: 4×10^{-12} at 300 kPa: 2×10^{-12}

* md = machine direction, cmd = cross machine direction, ** incliding 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	BBA BRITISH BOARD OF AGREMENT CERTIFICATE No 03/4042 · TUV NORD ISO 9001 · CE 0799-CPR-215		
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	☐ Type B	☐ Type C

Address: No. 128, Second sharhran square, Tehran, Iran
Phone Number: +9821-44366251, +9821-44337198
Website: www.sepantagroup.org
E-mail: Info@sepantagroup.org

SEPANTA BASEMENT WATERPROOFI