



Yuan Da Geosynthetic Clay Liner

Yuan Da Geosynthetic Clay Liner is made by distributing a uniform layer of granular sodium bentonite between two geotextiles. Fibres from the upper non-woven white polyester fabric are then needle-punched through the layer of bentonite and incorporated into the lower black polypropylene woven fabric. This process results in an even waterproof layer and a strong mechanical bond between the fabrics. Yuan Da GCL is available in grades from 3500g/m² to 5500g/m². Yuan Da GCL is available in rolls up to 5.8 m wide with a clearly marked overlap-line along the edge of each roll. All products are fully guaranteed.



Production capacity is 7.5 million m²/year and the GCL can be shipped directly to any port in Australia, thus saving freight costs.

Yuan Da GCL is suitable for landfill base lining, landfill caps and closures, liquid containment, cut off walls, ponds, dams, lagoons and tunnels. We also supply a construction grade GCL liner with an integrated PE liner for use under concrete slabs.

Yuan Da is the leading producer of geosynthetics in China. Its production facilities are ISO9001 and CE accredited. Yuan Da geosynthetics are produced in strict accordance with international standards including: strength, modulus, weather resistance, corrosion resistance and creep performance. These geotextiles have been tested by international experts under a wide range of environmental conditions.





Technical Data

	Test Standard	Units	Grade	Grade	Grade
Bentonite			YD1000	YD2000	YD3000
Swell Index	ASTM D-5890	ml/2g	≥ 26	≥ 26	≥ 26
Fluid Loss	ASTM-D-5891	ml	≥15	≥15	≥15
Moisture Content	ASTM D-4643	%	< 13	< 13	< 13
Coefficient of water absorption	ASTM D-4643	%	> 600	> 600	> 600
Geotextiles					
Cover (PET non-woven)	ASTM D 5261	g/m ²	> 200	> 270	> 270
Carrier (PP woven)	ASTM D 5261	g/m ²	> 110	> 110	> 110
Reinforcing layer (PET non woven)	ASTM D 5261	g/m ²		> 270	> 270
Yuan Da Liner (as manufactured)*					
Quality Assurance	ISO 9001, CE		Yes	Yes	Yes
GCL Total Mass	ASTM D-5993	g/m ²	> 4310	> 4350	> 5150
Bentonite Mass	ASTM D-5993	g/m ²	> 4000	> 3700	> 4500
GCL Rupture Intensity	GB/T15788-1995	kN/m	> 10	> 10	> 10
Grab Strength (MD/CMD)	ASTM D-4632	N	600	1000/1200	1000/1200
Peel Strength	ASTM D6496	N/m	500	800	800
CBR Strength	GB/T 14800-1993	N	≥ 1500	≥ 3000	≥ 3000
CBR Elongation	GB/T15788-1995	%	≥ 20	≥ 40	≥ 40
Hydrated Internal Shear Strength	ASTM D-6243 (periodic)	kPa	≥24	≥45	≥45
Hydraulic conductivity k-value (Permeability)	ASTM D-5887	m/s	≤3x10 ⁻¹¹	≤3x10 ⁻¹¹	≤3x10 ⁻¹¹
Dimensions – according to customer’s requirements					
Width		m	2 - 5.8	2 - 5.1	2 - 5.1
Length		m	12 - 35	12 - 35	12 - 35

Packaging

Yuan Da GCL is supplied on strong cardboard or PVC cores according to the customer’s requirements. Each roll is packed in a strong waterproof liner to prevent water absorption and loss of rigidity during transportation. Lifting slings can be fitted on request.

Benotonite paste and granular bentonite are also available.

