## Bentotex Range



Bentotex is a high specification geosynthetic clay liner, comprising of high quality natural sodium bentonite encapsulated between a woven and a non-woven needlepunched polypropylene geotextiles. Bentotex CL also has a geomembrane laminated to one side.

Bentotex adopts unique self-seeming overlaps technology which doesn't require any additional treatment of its longitudinal edges.

Property	Test Method	Bentotex 30	Bentotex 30-SL	Bentotex 45	Bentotex 45-SL	Bentotex 50	Bentotex 50-SL
Physical Properties							
Total mass per unit area <sup>1</sup>	EN 14196	3500 g/m <sup>2</sup>	3700 g/m <sup>2</sup>	4850 g/m <sup>2</sup>	5050 g/m <sup>2</sup>	5500 g/m <sup>2</sup>	5700 g/m <sup>2</sup>
Bentonite mass per unit area <sup>1</sup>	EN 14196	3200 g/m <sup>2</sup>	3200 g/m <sup>2</sup>	4550 g/m <sup>2</sup>	4550 g/m <sup>2</sup>	5200 g/m <sup>2</sup>	5200 g/m <sup>2</sup>
Bentonite mass per unit area <sup>3</sup>	EN 14196	2860 g/m <sup>2</sup>	2860 g/m <sup>2</sup>	4000 g/m <sup>2</sup>	4000 g/m <sup>2</sup>	4640 g/m <sup>2</sup>	4640 g/m <sup>2</sup>
Thickness <sup>6, 7</sup>	EN 9863-1	5.5 mm	5.7 mm	7.0 mm	7.0 mm	7.5 mm	7.5 mm
Hydraulic Properties							
Flux index <sup>2</sup>	EN 16416	6x10 <sup>-9</sup> m <sup>3</sup> /m <sup>2</sup> /s	No flow	4*10 <sup>-9</sup> m <sup>3</sup> /m <sup>2</sup> /s	No flow	3*10 <sup>-9</sup> m <sup>3</sup> /m <sup>2</sup> /s	No flow
Permeability <sup>9</sup>	DIN 18130 / ASTM 5887	3* 10-11	No flow	1.5*10 <sup>-11</sup>	No flow	1*10-11	No flow
Water Absorption		600%	600%	600%	600%	600%	600%
Montmorillonite content <sup>8</sup>	XRD	80%	80%	80%	80%	80%	80%
Mechanical Properties							
Peel Strength	ASTM D6496	1000 N/m	1000 N/m	1000 N/m	1000 N/m	1000 N/m	1000 N/m
Tensile strength⁴	EN ISO 10319	11 kN/m	12.5 kN/m	11 kN/m	12.5 kN/m	11 kN/m	12.5 kN/m
Static puncture resistance (CBR) <sup>5</sup>	EN ISO 12236	2.0 kN	2.2 kN	2.0 kN	2.2 kN	2.0 kN	2.2 kN
Textiles (PP)							
Non-Woven Mass/Unit Area8	EN ISO 9864	200 g/m <sup>2</sup>	200 g/m <sup>2</sup>	200 g/m <sup>2</sup>	200 g/m <sup>2</sup>	200 g/m²	200 g/m <sup>2</sup>
Woven Mass/Unit Area <sup>8</sup>	EN ISO 9864	100 g/m <sup>2</sup>	110 g/m <sup>2</sup>	110 g/m <sup>2</sup>	100 g/m <sup>2</sup>	100 g/m²	100 g/m <sup>2</sup>
Membrane <sup>8</sup>	EN ISO 9864	-	200 g/m <sup>2</sup>	-	200 g/m <sup>2</sup>	-	200 g/m <sup>2</sup>

- 1 average, at 12% moisture content, tolerance 4%
- 2 average, tolerance 0,5x10<sup>-9</sup> m<sup>3</sup>/m<sup>2</sup>/s
- 3 bentonite mass at 0% moisture content
- 4 average, tolerance 2.0 kN
- 5 Puncture resistance (CBR) with tolerance 0.2 kN
- 6 material is fully saturated and it is this measured at 2kPa pressure
- 7 average, tolerance 10 %
- 8 certified by supplier
- 9 average tolerance 0.5\*10<sup>-11</sup> m/s

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge becomes available. Since we cannot anticipate all variations in actual end use conditions, Geosynthetics Limited makes no warranties and assumes no liabilities in connection with this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.

