


**Product description:**

**Bentomat AS100** is a reinforced GCL consisting of a layer of natural sodium bentonite between a woven and a non-woven geotextile which are needlepunched together. Product is produced to meet the highest requirements.

**Function:**

Waterproofing, separation and protection

**Main Applications:**

Ground water protection, Road slopes trenches, Landfill caps, Closing of industrial landfill, Landfill bottom liner, Protection and support for HDPE liners and Ponds.

MATERIAL PROPERTIES	TEST METHOD	TEST FREQUENCY	CETCO REQUIRED VALUES
<b>GCL PROPERTIES</b>			
Flux	ASTM D 5887 -95	Weekly	< $1 \times 10^{-8}$ m <sup>3</sup> /m <sup>2</sup> s maximum < $5 \times 10^{-9}$ m <sup>3</sup> /m <sup>2</sup> s average
Permeability	ASTM D 5887	Weekly	< $2 \times 10^{-11}$ m/s
Mass / Area	EN 14196	5,000 m <sup>2</sup>	5000 g/m <sup>2</sup> **
Swell Index	ASTM D 5890	5,000 m <sup>2</sup>	25 ml/2g
Tensile Strength	EN ISO 10319	5,000 m <sup>2</sup>	9 kN/m typical
Breaking Elongation	EN ISO 10319	5,000 m <sup>2</sup>	5% < and < 50%
Peel Strength	EN ISO 10319	5,000 m <sup>2</sup>	65 N/ 100mm
Absorption for bentonite	DIN 18132	200,000 kg	≥500%
Thickness	EN 964-1	5,000 m <sup>2</sup>	6mm
Static burst strength	EN ISO 12236	50,000 m <sup>2</sup>	≥ 2 kN
Width, roll size	EN ISO 10320	5,000 m <sup>2</sup>	5.00 m
Bentonite quality	XRD	200,000 kg	>85%
Line for overlapping			30, 23 and 15 cm
<b>Woven and Non-woven properties</b>			
Effective pore size $O_{90}$ of textile	EN ISO 12956		< 0.2 mm
Mass/Unit Area nonwoven fabric	ASTM D 5261	N/A	Nonwoven textile > 200 g/m <sup>2</sup> Woven textile > 100 g/m <sup>2</sup>

**Bentomat® AS 100** is produced at Cetco's plant in Poland. Cetco Poland is *ISO 9001-2000* certificated producer of geosynthetic clay liners "GCL's" and produce products of highest quality.

**Bentomat® AS 100** can be delivered as a self seaming product with the use of sealing grooves. This is done without additional cost to the customer.

\*\* Measured at 15% moisture

