


Product description:

Bentomat AS120 LPS 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, Ponds and artificial lakes.

MATERIAL PROPERTIES	TEST METHOD	TEST FREQUENCY	CETCO REQUIRED VALUES
GCL PROPERTIES			
Flux	ASTM D 5887 -95	Weekly	< 1×10^{-8} m ³ /m ² s maximum < 5×10^{-9} m ³ /m ² s average
Permeability	ASTM D 5887	Weekly	< 2×10^{-11} m/s maximum
Mass / Area	EN 14196 (0% moisture)	5,000 m ²	5340 g/m ²
Mass / Area Bentonite	EN 14196 (0% moisture)	5,000 m ²	5000 g/m ²
Swell Index	ASTM D 5890	5,000 m ²	25 ml/2g
Tensile Strength	EN ISO 10319	5,000 m ²	≥ 12 kN/m minimum
Breaking Elongation	EN ISO 10319	5,000 m ²	5% < and < 50%
Peel Strength	EN ISO 10319	5,000 m ²	80 N/ 100mm minimum
Absorption for bentonite	DIN 18132	200,000 kg	>500%
Thickness	EN 964-1	5,000 m ²	7mm
Puncture resist (CBR)	EN ISO 12236	50,000 m ²	≥ 2800 kN
Width, roll size	EN ISO 10320	5,000 m ²	5.00 m
Bentonite quality	XRD VDG P69	200,000 kg	>80% > 300 mg
Organic material in bentonite	In bentonite one must not use any organic material, witch may increase swelling or decrease water permeability, unless their long term durability is accepted separately		Not used
Line for overlapping			30, 23 and 15 cm
Woven and Non-woven properties			
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 ² Woven textile >140 g/m ²

Bentomat® AS 120 LPS 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 120 LPS can be delivered as a self seaming product with the use of sealing grooves. This is done without additional cost to the customer.

