

GEODREN PPST 200

Nonwoven geotextile made by high tenacity polypropylene staples, UV stabilized, needlepunched and calandered, produced without using of any glues or chemical binders and post-consumer raw material.

Physical properties	Standard		Value	Units	Tolerance %	Tolerance (units)
Mass per unit area	[ASTM D 5261]		200	g/m ²	+/- 10	+/- 20
Thickness	[ASTM D 5199]	2 kPa	1,20	mm	+/- 20	+/- 0,24
Mechanical properties	Standard		Value	Units	Tolerance %	Tolerance (units)
Tensile strength	[ASTM D 4595]	MD	15,0	kN/m	- 10	- 1,5
	[ASTM D 4595]	CMD	16,0	kN/m	- 10	- 1,6
Elongation at maximum load	[ASTM D 4595]	MD	65	%	+/- 30	+/- 20
	[ASTM D 4595]	CMD	70	%	+/- 30	+/- 21
Static puncture resistance CBR	[ASTM D 6241]		2,50	kN	- 10	- 0,25
Dynamic puncture resistance	[EN ISO 13433]		18	mm	+ 20	+ 4
G-Rating	[Austroads]		2240	-	- 0	- 0
Pyramidal puncture resistance	[EN 14574]		200	N	- 20	- 40
Grab resistance	[ASTM D 4632]	MD	765	N	- 15	- 115
	[ASTM D 4632]	CMD	870	N	- 15	- 131
Grab elongation	[ASTM D 4632]	MD	70	%	+/- 30	+/- 21
	[ASTM D 4632]	CMD	75	%	+/- 30	+/- 23
Average Trapezoid tearing strength	[ASTM D 4533]		250	N	- 20	- 50
Mullen burst resistance	[ASTM D 3786]		2600	kPa	- 20	- 520
Rod puncture	[ASTM D 4833]		530	N	- 10	- 53
Hydraulic properties	Standard		Value	Units	Tolerance %	Tolerance (units)
Velocity index	[EN ISO 11058]		60	mm/s	- 30	- 18
Permeativity	[EN ISO 10318]		1,20	s-1		
In-plane flow capacity	[EN ISO 12958]		2,10	10-3 l/ms	- 30	- 0,63
Transmissivity	[EN ISO 12958]	20 kPa	2,10	10-3 l/ms	- 30	- 0,63
Characteristic opening size	[EN ISO 12956]		60	µm	+/- 30	+/- 18
Characteristic opening size	[ASTM D4751]		< 75	µm		
Durability properties	Standard		Value	Units	Tolerance %	Tolerance (units)
Weathering resistance	[EN 12224]	To be covered within 30 days from the day of installation.				
Residual strength after weathering test	[EN 12226]	Residual strength higher than 60% of initial resistance.				
Resistance to oxidation	[EN ISO 13438]	Forecast minimum durability of 25 years in natural ground with 4<pH<9 and soil temperature < 25°C.				
Residual strength after oxidation test	[EN 12226]	Residual strength greater than or equal to 50% of initial resistance.				
Residual strength after UV exposition	[ASTM D 4355]	Residual strength greater/equal of 70% after 500 hours.				
The values given are an average obtained in our laboratories and in official testing institutes. The confidence level is 95% The right is reserved to make changes any time without notice.						

MD = Machine Direction/Longitudinale; CMD = Cross Machine Direction/Trasversale; NA = Not Applicable/Non Applicabile

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