PPS Polypropylene geotextile - high tenacity nonwoven virgin fibre fabric

Physical Properties		test method	unit																												Tolerance	
Weight / mass per unit area		EN ISO 9864	**g/m²**	**70**	**90**	**100**	**110**	**120**	**130**	**150**	**180**	**200**	**230**	**250**	**280**	**300**	**320**	**350**	**380**	**400**	**450**	**500**	**600**	**700**	**800**	**1000**	**1200**	**1500**	**2000**	±	**10%**
Thickness		EN ISO 9863-1	mm	0.4	0.60	0.65	0.70	0.80	0.90	1.00	1.20	1.30	1.40	1.50	1.55	1.60	1.65	1.80	2.20	2.50	2.65	3.00	4.00	5.00	5.50	6.50	7.00	7.50	7.50	±	20%
Mechanical Properties																																
Tensile Strength	**md**	EN ISO 10319	kN/m	3.2	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	23.0	25.0	25.0	27.0	28.0	30.0	32.0	35.0	40.0	45.0	50.0	60.0	70.0	85.0	75.0	–	10%
	cmd	EN ISO 10319	kN/m	3.5	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	23.0	25.0	27.0	30.0	32.0	34.0	36.0	40.0	50.0	65.0	80.0	90.0	105.0	140.0	155.0	–	10%
Elongation at max load	**md**	EN ISO 10319	%	55	55	55	55	55	55	55	60	60	65	65	65	65	70	70	70	70	80	80	80	80	80	80	80	80	80	±	30%
	cmd	EN ISO 10319	%	60	60	60	60	60	60	60	65	65	70	70	70	70	70	70	70	70	80	80	80	80	80	80	80	80	80	±	30%
Energy index		EN ISO 10318	kJ/m²	1.0	1.7	2.0	2.3	2.6	2.9	3.5	4.4	5.0	6.1	6.8	7.8	8.4	9.1	10.0	10.5	11.2	13.6	15.0	18.0	22.0	26.0	30.0	35.0	45.0	46.0	±	20%
Static puncture resistance		EN ISO 12236	kN	0.7	0.9	1.2	1.3	1.5	1.7	1.9	2.2	2.4	2.7	3.0	3.5	4.0	4.2	4.5	5.0	5.5	6.0	6.5	8.0	9.0	10.0	13.0	14.0	18.0	20.0	–	10%
Dynamic puncture resistance (cone drop test)		EN ISO 13433	mm	>50	44	38	34	32	30	26	22	20	16	14	12	10	10	8	8	6	6	4	2	1	0	0	0	0	0	+	20%
Pyramid puncture resistance		EN 14574	N	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	200	220	280	320	330	335	340	350	350	400	500	700	900	1000	1300	1600	2200	2200	–	20%
Hydraulic properties																																
Permeability normal to the plane		EN ISO 11058	mm/s	130	130	125	120	115	110	100	95	90	80	75	70	65	30	50	40	35	30	30	25	20	20	15	15	15	5	–	30%
In-plane flow capacity		EN ISO 12958	10^{-3}l/ms	0.8	0.80	0.80	0.80	0.80	0.80	1.60	1.60	2.10	2.10	2.30	2.30	2.50	2.50	2.70	2.80	3.20	4.00	5.00	7.80	8.00	8.50	9.00	9.00	9.00	7.00	–	30%
Trasmissivity		EN ISO 10318	l/m s		0.80	0.80		0.80	0.80	1.60	1.60	2.10	2.10	2.30			2.50			3.20		5.00			8.50	9.00		9.00				
Opening size		EN ISO 12956	µm	120	120	120	110	110	100	90	90	80	70	60	50	50	50	50	50	50	50	50	50	50	40	40	40	40	20	±	30%
Durability properties																																
Weathering resistance		EN 12224	Passes EN 12224 weathering test. It is highly recommended that the geotextile is covered within 30 days from the day of installation. The material can be exposed to sunlight for a maximum of 4 months with a degredation of the mechanical properties depending on season.																														
Product Composition			Made from virgin fibre polypropylene, UV stabilised. Specific weight of polymer is 0.91 kg/dm^3 . Raw material is staple fibres, produced through needlepunching and calandering. Melting point is 165-175 °C. Fibre diamater is 25-30 µm. The material is produced according the quality management system of EN ISO 9001:2008. It fulfills the requirement of European regulations related to construction products as per 1213-CPR 3269.																														
Oxydation resistance		EN ISO 13438	Forecast minimum durability of 25 years for every application in natural grounds with 4<pH<9 and soil temperature <25°C																														

The values given are an average obtained in our laborotories and in official testing insitutes

The confidence level is 95%

We reserve the right to make changes at any time without notice

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Notified body

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