



PPS Polypropylene geotextile fabrics

Physical Properties		test method	unit																		Tolerance						
Weight			g/m²	90	100	105	120	125	140	150	170	180	200	220	230	250	260	320	400	500	600	800	1000	1500	±	10%	
	2kPa	EN ISO 9863-1	mm	0.60	0.65	0.65	0.70	0.75	0.90	0.90	1.10	1.10	1.20	1.30	1.30	1.40	1.45	1.70	2.20	3.00	3.50	4.20	4.80	7.50	±	20%	
Thickness		20kPa	EN ISO 9863-2	mm	0.50	0.50	0.55	0.60	0.65	0.75	0.80	0.90	1.00	1.10	1.10	10.25	1.30	1.50	1.90	2.40	2.80	3.90	4.50	6.50	±	20%	
	200kPa	EN ISO 9863-3	mm	0.40	0.40	0.40	0.50	0.55	0.55	0.60	0.70	0.70	0.75	0.90	0.90	1.00	1.10	1.30	1.50	1.90	2.10	3.10	4.00	5.60	±	20%	
Mechanical Properties																											
Tensile Strength		md	EN ISO 10319	kN/m	6.5	6.0	8.0	9.0	9.0	10.5	11.0	12.0	13.5	15.0	16.0	16.5	18.0	19.5	24.0	28.0	35.0	40.0	52.0	68.0	85.0	-	10%
		cmd	EN ISO 10319	kN/m	6.5	6.0	8.0	9.0	9.0	10.5	11.0	12.0	14.0	16.0	17.0	17.5	19.0	20.5	27.0	34.0	42.0	50.0	64.0	80.0	130.0	-	10%
Elongation at max load		md	EN ISO 10319	%	65	52	65	65	65	65	55	60	65	65	65	65	65	65	65	75	75	80	90	100	±	30%	
		cmd	EN ISO 10319	%	70	55	70	70	70	70	55	60	70	70	70	70	70	70	70	80	80	80	90	100	±	30%	
Energy index			EN ISO 10318	kJ/m ²	2.2	2.0	2.7	3.0	3.0	3.5	4.5	5.0	4.6	5.2	5.6	5.7	6.2	6.8	8.6	10.5	14.9		23.2	33.3	53.8	±	20%
Static puncture resistance			EN ISO 12236	kN	1.1	1.1	1.2	1.4	1.4	1.8	1.7	2.0	2.3	2.5	2.8	2.9	3.3	3.4	4.3	5.5	6.5	7.5	9.5	14.0	20.0	-	10%
Dynamic puncture resistance (cone drop test)			EN ISO 13433	mm	38	38	34	30	32	26	30	26	20	18	16	15	14	14	12	7	4	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	150	200	420	440	440	440	480	600	700	900	1100	1200	2500	-	20%
Grad Resistance		md	ASTM D 4632	N	360		410			525			680	765		875		1050	1400	1700	1800		2500	3200	6200	-	15%
		cmd	ASTM D 4632	N	390		430			580			790	870		1050		1250	1550	1900	2050		2800	4000	9000	-	15%
Grab Elongation		md	ASTM D 4632	%	60		60			60			65	70		70		75	80	90	90		90	90	90	±	20%
		cmd	ASTM D 4632	%	70		70			70			75	75		75		80	85	90	90		90	90	90	±	20%
Trapezoid tearing strength		md	ASTM D 4533	N	90		110			170			220	240		260		290	350	430	530		830	1030	1530	-	20%
		cmd	ASTM D 4533	N	110		130			190			240	260		280		310	370	450	550		850	1050	1550	-	20%
Hydraulic properties																											
Velocity index VI			EN ISO 11058	mm/s	120	80	110	110	100	90	69	65	70	60	60	55	55	55	30	25	25	25	25	20	15	-	30%
Permeability coefficient normal to the plane			EN ISO 10318	l/m ² s	120		110	110	100	90			70	60	60	55	55	30	25	25	25	25	20	15	-	30%	
Permittivity			EN ISO 10318	s ⁻¹	2.40	1.60	2.20		2.00	1.80	1.38	1.30	1.40	1.20		1.10	1.10	0.60	0.50	0.50		0.50	0.40	0.30			
Coefficient of permeability normal to the plane			EN ISO 10318	m/s	1.44	1.04	1.43	110	1.50	1.62	1.24	1.43	1.54	1.44		1.43	1.60	1.02	1.10	1.50		2.10	1.92	2.25			
Hydraulic gradient			EN ISO 10318		83		77			56			45	42		38		34	29	23	17		12	10	7		
In-plane flow capacity at 20kPa		md	EN ISO 12958	10 ⁻⁵ m ² /s	0.80	0.80	0.80	0.80	0.80	0.80			1.60	2.10	2.10	2.10	2.30	2.30	2.50	3.20	5.00	7.80	8.50	9.00	9.00	-	30%
			EN ISO 10318	l/m s	0.80	0.80	0.80	0.80	0.80	0.80			1.60	2.10	2.10	2.10	2.30	2.30	2.50	3.20	5.00		8.50	9.00	9.00		
Opening size			EN ISO 12956	µm	90	89	90	90	85	70	70	64	60	60	60	60	55	55	50	50	50	50	40	40	40	±	30%
Durability properties																											
Weathering resistance			EN 12224	To be covered within 15 days from the day of installation																							
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																							
Residual strength after UV exposition			ASTM D 4355	Residual strength higher than of 70% after 500 hours																							
The values given are an average obtained in our laboratories and in official testing insitutes																											
The confidence level is 95%																											
The is reserved to make changes at any time without notice																											



Wallbarn Ltd • Tandridge Priory • Barrow Green Road • Oxted • Surrey • RH8 9NE



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