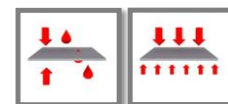


NW

Thermally bonded Nonwoven Geotextiles



Technical Data Sheet 1/2

Date: 24-1-2013 rev 21

Mechanical Properties	Test	Units	NW 5	NW6	NW7	NW8	NW9	NW10	NW12	NW13	NW15	NW16
Tensile Strength - MD	EN ISO 10319	kN/m	5,0	6,0	7,0	8,0	9,0	10,0	12,0	13,0	15,0	16,0
Tensile Strength - XD	EN ISO 10319	kN/m	5,0	6,0	7,0	8,0	9,0	10,0	12,0	13,0	15,0	16,0
Elongation at break - MD	EN ISO 10319	%	40,0	40,0	40,0	40,0	40,0	40,0	40,0	45,0	45,0	45,0
Elongation at break - XD	EN ISO 10319	%	40,0	40,0	45,0	45,0	45,0	45,0	45,0	50,0	50,0	50,0
CBR Puncture Resistance	EN ISO 12236	N	850	890	1 200	1 240	1 500	1 600	1 780	2 200	2 500	2 400
Dynamic Cone Drop	EN ISO 13433	mm	42	40	37	34	30	28	24	21	20	19

Hydraulic Properties												
Permeability	EN ISO 11058	m/s	125 x 10 ⁻³	120 x 10 ⁻³	115 x 10 ⁻³	110 x 10 ⁻³	108 x 10 ⁻³	106 x 10 ⁻³	105 x 10 ⁻³	100 x 10 ⁻³	90 x 10 ⁻³	85 x 10 ⁻³
Waterflow normal to the plane	EN ISO 11058	l/m ² .s	125	120	115	110	108	106	105	100	90	85
Waterflow in the plane-20kPa	EN ISO 12958	m ² /s	1 x 10 ⁻⁷	1 x 10 ⁻⁷	1 x 10 ⁻⁷	1 x 10 ⁻⁷	2 x 10 ⁻⁷	2 x 10 ⁻⁷	2 x 10 ⁻⁷	3 x 10 ⁻⁷	3 x 10 ⁻⁷	1 x 10 ⁻⁶
Characteristic Opening Size	EN ISO 12956	µm	145	140	135	120	115	110	105	100	90	85

Physical Properties												
Thickness under 2 kPa	EN ISO 9863-1	mm	0,75	0,85	0,90	1,00	1,10	1,15	1,40	1,45	1,20	1,25
Weight	EN ISO 9864	g/m ²	70	80	85	100	110	120	145	160	180	200
Roll width		cm	525	525	525	525	525	525	525	525	525	525
Roll length		m	100	100	100	100	100	100	100	100	100	100
Full truck load volume (+/- 10%)		m ²	105 000	94 500	86 625	70 875	68 250	65 625	47 250	45 675	47 250	43 050
Roll diameter (+/- 10%)		cm	27	28	29	30	31	33	36	37	36	37

Durability		
Natural UV light	ASTM 4533	100%
Chemical Resistance	EN 14030	100%
Oxidation Resistance	EN ISO 13438	>90%
Microbiological Resistance	EN 12225	100%
Hydrolysis	EN 12447	100%

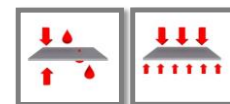
Product Description	
Polymer	100% Polypropylene
Density	0,91 kg/dm ³
Melting Point	165°C
Fiber bonding	Mechanical/Thermal



Bonar reserves the right to alter product specifications without prior notice. It is the responsibility of all users to satisfy themselves that the above data is current. The above figures are average values obtained from testing to current EN ISO geotextile test standards. All these products need to be covered within 2 weeks.

NW

Thermally bonded Nonwoven Geotextiles



Technical Data Sheet 2/2

Date: 3-12-2012 rev 18

Mechanical Properties	Test	Units	NW18	NW20	NW21	NW25	NW26	NW32	NW40	NW 45
Tensile Strength - MD	EN ISO 10319	kN/m	18,0	20,0	21,0	25,0	26,0	32,0	40,0	45,0
Tensile Strength - XD	EN ISO 10319	kN/m	18,0	20,0	21,0	25,0	26,0	32,0	40,0	45,0
Elongation at break - MD	EN ISO 10319	%	45,0	50,0	50,0	50,0	50,0	50,0	55,0	65,0
Elongation at break - XD	EN ISO 10319	%	50,0	50,0	50,0	50,0	50,0	50,0	55,0	65,0
CBR Puncture Resistance	EN ISO 12236	N	3 000	3 100	3 500	3 600	4 350	5 400	6 500	7 800
Dynamic Cone Drop	EN ISO 13433	mm	17	16	15	12	11	10	6	4
Pyramid Puncture	EN 14574	N				300	352	385	617	700

Hydraulic Properties										
Permeability	EN ISO 11058	m/s	70×10^{-3}	65×10^{-3}	60×10^{-3}	55×10^{-3}	45×10^{-3}	40×10^{-3}	30×10^{-3}	25×10^{-3}
Waterflow normal to the plane	EN ISO 11058	l/m ² .s	70	65	60	55	45	40	30	25
Waterflow in the plane-20kPa	EN ISO 12958	m ² /s	3×10^{-6}	3.5×10^{-6}	4×10^{-6}	4×10^{-6}	4×10^{-6}	4×10^{-6}	4×10^{-6}	4.5×10^{-6}
Characteristic Opening Size	EN ISO 12956	µm	75,0	70,0	65,0	65,0	65,0	65,0	65,0	65,0

Physical Properties										
Thickness under 2 kPa	EN ISO 9863-1	mm	1,30	1,40	1,50	1,60	1,80	1,90	2,50	2,96
Weight	EN ISO 9864	g/m ²	215	235	260	300	325	385	500	625
Roll width		cm	525	525	525	525	525	525,0	525	525
Roll length		m	100	100	100	100	100	100,0	100	100
Full truck load volume (+/- 10%)		m ²	43 050	35 175	30 450	30 450	28 875	22 050	15 750	12 600
Roll diameter (+/- 10%)		cm	38	42	44	46	48	53	62	66

Durability			Product Description	
Natural UV light	ASTM 4533	100%	Polymer	100% Polypropylene
Chemical Resistance	EN 14030	100%	Density	0,91 kg/dm ³
Oxidation Resistance	EN ISO 13438	>90%	Melting Point	165°C
Microbiological Resistance	EN 12225	100%	Fiber bonding	Mechanical/Thermal
Hydrolysis	EN 12447	100%		



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