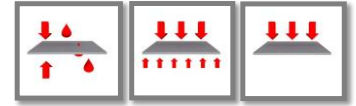


## SNW

### Superior Needle Punched Nonwoven Geotextiles



### Technical Data Sheet 2/2

Date: 3-12-2012 rev 15

Mechanical Properties	Test	Units	62	70	75	80	85	90	100	120	140
Tensile Strength - MD	EN ISO 10319	kN/m	37,0	42,0	43,0	45,0	50,0	54,0	58,0	70,0	84,0
Tensile Strength - XD	EN ISO 10319	kN/m	37,0	42,0	43,0	45,0	50,0	54,0	58,0	70,0	84,0
Elongation at break - MD	EN ISO 10319	%	60,0	60,0	60,0	65,0	70,0	70,0	70,0	70,0	70,0
Elongation at break - XD	EN ISO 10319	%	65,0	65,0	65,0	70,0	70,0	70,0	70,0	70,0	70,0
CBR Puncture Resistance	EN ISO 12236	N	6200	7000	7400	8000	8500	9000	10000	11500	14000
Dynamic Cone Drop	EN ISO 13433	mm	5	4	3	2	2	1	1	0	0
Pyramid Puncture	EN 14574	N	600,0	705,0	750,0	810,0	850,0	900,0	1000,0	1250,0	1700,0

Hydraulic Properties											
Permeability	EN ISO 11058	m/s	40x10 <sup>-3</sup>	35x10 <sup>-3</sup>	33x10 <sup>-3</sup>	30x10 <sup>-3</sup>	29x10 <sup>-3</sup>	28x10 <sup>-3</sup>	28x10 <sup>-3</sup>	20x10 <sup>-3</sup>	15x10 <sup>-3</sup>
Waterflow normal to the plane	EN ISO 11058	l/m <sup>2</sup> .s	40	35	33	30	29	28	28	20	15
Waterflow in the plane-20kPa	EN ISO 12958	m <sup>2</sup> /s	6,5x10 <sup>-6</sup>	7x10 <sup>-6</sup>	7x10 <sup>-6</sup>	6x10 <sup>-6</sup>	8,5x10 <sup>-6</sup>	7x10 <sup>-6</sup>	8x10 <sup>-6</sup>	8,5x10 <sup>-6</sup>	9x10 <sup>-6</sup>
Characteristic Opening Size	EN ISO 12956	µm	72,0	70,0	68,0	65,0	63,0	60,0	58,0	55,0	49,0

Physical Properties											
Thickness under 2 kPa	EN ISO 9863-1	mm	3,5	3,8	4	4,4	4,6	4,7	5,0	6,0	7,0
Weight	EN ISO 9864	g/m <sup>2</sup>	500	565	600	650	700	750	800	1000	1200
Roll width		cm	525	525	525	525	525	525	525	525	525
Roll length		m	50	60	55	55	50	50	50	35	35
Full truck load volume (+/- 10%)		m <sup>2</sup>	14 700	13 860	12 994	12 416	10 500	10 500	10 500	8 085	6 614
Roll diameter (+/- 10%)		cm	48	56	55	57	58	58	60	57	62

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



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.