

## Technical Data Sheet Geotextiles

### Description

Thick needle punched nonwoven geotextiles manufactured from 100% virgin polypropylene high tenacity fibres containing 1% active carbon black

### Applications

Typical applications for geotextiles include, but are not limited to:  
 Membrane protection in landfill cells and cover systems  
 Soil filtration and separation beneath rock armour in coastal defence  
 Soil filtration within landfill cells  
 Heavy duty soil filters in civil applications

### Features

Optimised for maximum strength and performance – not mass  
 Available in wide widths to allow for minimal construction costs – up to 6m  
 Manufactured from a unique blend of high tenacity fibres providing class leading durability  
 100% virgin polypropylene fibres for guaranteed durability  
 Carbon black for UV stability

	Test	Unit	Mean Values																		
4. Mechanical Properties			HPS2.5	HPS3	HPS3.3	HPS4	HPS5	HPS6	HPS7	HPS8	HPS9	HPS11	HPS12	HPS14	HPS17	HPS19	HPS22	HPS25	HPS30	HPS35	HPS40
Static Puncture (CBR)	EN ISO 12236	kN	2.5	3	3.3	4	5	6	7	8	9	11	12	14	17	19	22	25	30	35	40
Push through displacement		mm	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Tensile strength (MD/CMD)	EN ISO 10319	kN/m	15	20	22	25	30	35	40	45	50	60	65	75	90	100	115	130	160	180	210
Tensile elongation (MD/CMD)		%	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Cone drop	EN ISO 13433	mm	10	6	13	5	5	4	3	2	2	1	1	0	0	0	0	0	0	0	0
Protection efficiency	EN ISO 13719	kN/m <sup>2</sup>	-	-	-	-	14	20	25	30	33	39	42	48	56	60	90	100	139	175	210
5. Filter Properties																					
Apparent opening size	EN ISO 12956	µm	150	130	60	100	80	80	80	70	70	<69	<69	<69	<69	<69	<69	<69	<69	<69	<69
Water permeability V <sup>H50</sup>	EN ISO 11058	l/(m <sup>2</sup> .s)	100	85	85	75	65	55	50	45	40	35	30	30	15	10	9	8	8	5	5
Coefficient of permeability		m/s 10 <sup>-3</sup>	7.0	6.6	6.6	6.6	6.4	5.7	5.5	5.2	4.8	4.7	4.2	3.9	2.6	1.9	1.9	2.2	2.4	1.7	1.7
6. Physical Properties																					
Thickness @ 2kPa (normal)	EN ISO 9863-1	mm	3.5	3.9	3.0	4.4	4.9	5.2	5.5	5.8	6.0	6.7	7.0	7.8	8.8	9.5	10.5	14.0	15.0	16.5	17.0
Carbon black content	1% Active Carbon Black																				
Standard colour	Black																				
Polymer	100% Virgin Polypropylene																				

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