

# GeofanTex® GFP Geotextile

## Technical Data Sheet

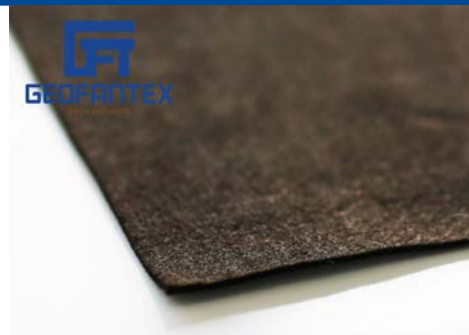
GeofanTex® GFP Jan. 2020

GeofanTex® GFP is 100% Polypropylene Staple Fiber Needle Punched non-woven Geotextile. The high quality PP raw material offers the most stable polymer against chemical / biological attack in groundwater with extreme pH conditions.

Manufactured from short fibres that are crimped, this range of geotextile offers excellent energy absorption characteristics as well as hydraulic performance. GeofanTex® GFP is suitable in many applications, including the following:

- **Filtration**
- **Coastal hydraulic works**
- **Drainage**
- **Protection of geomembranes in landfill lining systems**

**GeofanTex® GFP is manufactured in widths of 6mts, thus reducing wastage by fewer overlaps and allows rapid, easy installation**



## Mechanical Properties

(T: Typical value M: Minimum Average Roll Value - MARV)

Properties (Standard)	Unit	GFP 100	GFP 150	GFP 200	GFP 250	GFP 300	GFP 350	GFP 400	GFP 450	GFP 500	GFP 550	GFP 600
Tensile Strength [ASTM D 4595]	T M KN/m	6.0 4.8	10 7.8	13 11	17 15	21 17	25 19	29 23	32 25	34 26	38 28	44 31
Tensile Elongation [ASTM D 4595]	T M %	80 50	70 50	70 50	70 50	60 50	60 50	60 50	60 50	60 50	60 50	60 50
Grab Strength [ASTM D 4632]	T M KN	0.37 0.29	0.52 0.39	0.65 0.52	0.87 0.70	0.99 0.75	1.32 1.09	1.58 1.33	1.75 1.35	1.94 1.54	2.07 1.64	2.3 2.1
Grab Elongation [ASTM D 4632]	T M %	80 50	70 50	70 50	60 50	60 50	60 50	60 50	60 50	60 50	60 50	60 50
Trapezoidal Tear [ASTM D 4533]	T M KN	0.16 0.12	0.24 0.18	0.29 0.20	0.39 0.30	0.44 0.38	0.51 0.43	0.64 0.51	0.68 0.52	0.74 0.63	0.80 0.63	0.90 0.75
CBR Burst Strength [ASTM D 6241]	T M KN(>=)	1.11 0.85	1.67 1.25	2.23 1.82	2.77 2.41	3.4 3.0	3.8 3.2	5.2 3.9	5.3 4.0	5.9 5.03	6.05 4.7	6.19 5.78
Puncture resistance [ASTM D 4833]	T M KN(>=)	0.21 0.16	0.31 0.22	0.44 0.24	0.50 0.38	0.57 0.50	0.72 0.58	0.86 0.83	0.97 0.77	1.02 0.81	1.04 0.86	1.05 0.96

## Hydraulic Properties

Flow Rate, 100mm head [ASTM D 4491]	L/s/m <sup>2</sup>	161	142	106	85.5	75	61	53.2	50	48	44	40
Flow Rate, 50mm head [ASTM D 4491]	L/min/m <sup>2</sup>	5600	4735	3251	2922	2659	2397	2113	2045	2013	1976	1889
Apparent Opening Size O <sub>95</sub> [ASTM D 4751]	microns ≤	120	110	100	90	90	75	75	75	75	75	75
Apparent Opening Size O <sub>90</sub> [EN ISO 12956]	µm ≤	120	120	120	120	120	110	110	110	110	110	110
Permittivity [ASTM D 4491]	Sec <sup>-1</sup>	2.5	2.3	2.0	1.3	1.1	0.9	0.8	0.7	0.7	0.6	0.5

## Endurance

UV Resistance Strength Retained @ 500hrs	%	70	70	70	70	70	70	70	70	70	70	70
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## Physical Identification Properties

Thickness (2KP) [ASTMD5199]	M T mm	0.9 0.7	1.1 0.9	1.2 1.0	1.3 1.1	1.5 1.3	2.0 1.8	2.2 1.9	2.5 2.2	2.8 2.7	3.0 2.7	4.3 4.0
Mass per Unit [ASTM D5261]	T g/m <sup>2</sup>	100	150	200	250	300	350	400	450	500	550	600
Roll Width	m(≤)	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6	2/4/6
Roll Length	m(≥)	440	290	220	175	145	125	110	100	90	80	75
Approx Load Q'ty / 40' HQ	Sq. m	105600	69600	52800	42000	34800	30000	26400	24000	21600	19200	18000

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# GeofanTex® GFP Geotextile

## Technical Data Sheet

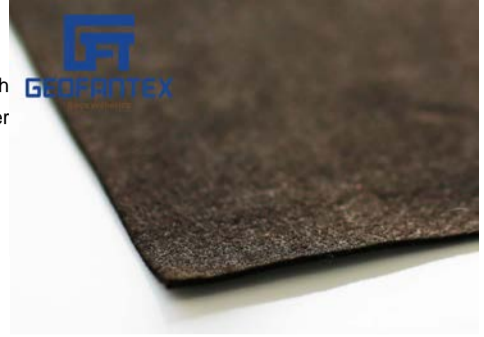
GeofanTex® GFP May 2020

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- **Drainage**                        · **Protection of geomembranes in landfill lining systems**

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## Mechanical Properties

(T: Typical value M: Minimum Average Roll Value - MARV)

Properties (Standard)	Unit	GFP 800	GFP 1000	GFP 1200	GFP 2000
Tensile Strength	T	56	67	82	135
[ASTM D 4595]	M	42	51	65	102
Tensile Elongation	T	60	60	60	60
[ASTM D 4595]	M	50	50	50	50
Grab Strength	T	2.9	3.4	4.55	7.15
[ASTM D 4632]	M	2.1	2.4	3.23	5.43
Grab Elongation	T	60	60	60	60
[ASTM D 4632]	M	50	50	50	50
Trapezoidal Tear	T	1.05	1.26	1.67	2.77
[ASTM D 4533]	M	0.90	1.08	1.39	2.19
CBR Burst Strength	T	8.19	10.43	12.58	20.58
[ASTM D 6241]	M	6.78	8.67	10.57	16.89
Puncture resistance	T	1.05	1.33	1.46	2.26
[ASTM D 4833]	M	0.96	1.24	1.38	2.83

## Hydraulic Properties

Flow Rate, 100mm head	L/s/m <sup>2</sup>	38	36	36	N/A
[ASTM D 4491]					
Flow Rate, 50mm head	L/s*sqm	1812	1759	1533	N/A
[ASTM D 4491]					
Apparent Opening Size O <sub>95</sub>	microns≤	70	70	70	N/A
[ASTM D 4751]					
Apparent Opening Size O <sub>90</sub>	µm≤	105	105	104	N/A
[EN ISO 12956]					
Permittivity[ASTM D 4491]	Sec <sup>-1</sup>	0.4	0.4	0.4	N/A

## Physical Identification Properties

Thickness (2KP)	T	5.01	5.65	6.15	N/A
[ASTMD5199]	M	4.43	4.93	5.87	N/A
Mass per Unit	T	800	1000	1200	2000
[ASTM D5261]					
Roll Width	m(≤)	4	4	4	4
Roll Length	m(≥)	57	45	40	24
Approx Load Q'ty / 40' HQ	Sq. m	13680	10800	9600	5760

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