GeofanTex GFP Geotextile

Technical Data Sheet GeofanTex™ GFP Jan. 2018

GeofanTex TMGFP 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	т	KN/m	6.0	10	13	17	21	25	29	32	34	38	44
[ASTM D 4595]	M		4.8	7.8	11	15	17	19	23	25	26	28	31
Tensile Elongation	т	%	80	70	70	70	60	60	60	60	60	60	60
[ASTM D 4595]	М		50	50	50	50	50	50	50	50	50	50	50
Grab Strength	т	KN	0.37	0.52	0.65	0.87	0.99	1.32	1.58	1.75	1.94	2.07	2.3
[ASTM D 4632]	Μ		0.29	0.39	0.52	0.70	0.75	1.09	1.33	1.35	1.54	1.64	2.1
Grab Elongation	т	%	80	70	70	60	60	60	60	60	60	60	60
[ASTM D 4632]	М		50	50	50	50	50	50	50	50	50	50	50
Trapezoidal Tear	т	KN	0.16	0.24	0.29	0.39	0.44	0.51	0.64	0.68	0.74	0.80	0.90
[ASTM D 4533]	М		0.12	0.18	0.20	0.30	0.38	0.43	0.51	0.52	0.63	0.63	0.75
	т	KN(>-)	1.11	1.67	2.23	2.77	3.4	3.8	5.2	5.3	5.9	6.05	6.19
	Μ	KN(>=)	0.85	1.25	1.82	2.41	3.0	3.2	3.9	4.0	5.03	4.7	5.78
Puncture resistance	т		0.21	0.31	0.44	0.50	0.57	0.72	0.86	0.97	1.02	1.04	1.05
[ASTM D 4833]	Μ	KN(>=)	0.16	0.22	0.24	0.38	0.50	0.58	0.83	0.77	0.81	0.86	0.96
Hydraulic Properties													
Flow Rate, 100mm head		L/s/m ²	161	142	106	85.5	75	61	53.2	50	48	44	40
[ASTM D 4491]													
Flow Rate, 50mm head		L/min/ m²	5600	4735	3251	2922	2659	2397	2113	2045	2013	1976	1889
[ASTM D 4491] Apparent Opening Size O													
[ASTM D 4751]		microns ≤	120	110	100	90	90	75	75	75	75	75	75
Apparent Opening Size O ₉₀ [EN ISO 12956]		µm≤	120	120	120	120	120	110	110	110	110	110	110
Permittivity[ASTM D 4491]	Sec ⁻¹	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 @ 500	hrs	%	70	70	70	70	70	70	70	70	70	70	70
Physical Identification		erties											
Thickness (2KP) M		mm	0.9	1.1	1.2	1.3	1.5	2.0	2.2	2.5	2.8	3.0	4.3
[ASTMD5199] T			0.7	0.9	1.0	1.1	1.3	1.8	1.9	2.2	2.7	2.7	4.0
Mass per Unit [ASTM D5261]		g/m²	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' HC	2	Sq. m	105600	69600	52800	42000	34800	30000	26400	24000	21600	19200	18000

Above values are on an average basis, the data was obtained from in-house test laboratory, National test institutes and international test institutes. Geofantex Geosynthetics keeps the right of data changes and the final explanation right. Liability Exclusion: This publication should not be construed as engineering advice. While information contained here is accurate to the best of our knowledge, Geofantex Geosynthetics is set forth in our Product Test Report accompanies our shipment of the products, or such other written warranty as may be agreed by Geofantex Geosynthetics and customer. Geofantex Geosynthetics and customer. Geofantex Geosynthetics and customer. Geofantex Geosynthetics express or implied, including without agreed by Geofantex Geosynthetics and customer. Geofantex Geosynthetics of the products, or sing from provision of samples, a course of dealing or usage of trade.



Geofantex Geosynthetics Co., Ltd.

NO. 10, Aixian Street, Gaoxin Dist., Dalian, China

TEL.:86-411-39569550 Fax: 86-4008266163-44899

Web:<u>www.geofantex.com</u>

Email:info@geofantex.com

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Technical Data Sheet

GeofanTex GFP May 2019

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- 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

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Mechanical Properties



lechanical Properties				(T: Typical value M: Minimu	ım Average Roll Value - MAF	RV)	
Properties (Standard)		Unit	GFP 800	GFP 1000	GFP 1200	GFP 2000	
Tensile Strength	т		56	67	82	135	
[ASTM D 4595]	М	KN/m	42	51	65	102	
Tensile Elongation	т		60	60	60	60	
[ASTM D 4595]	М	%	50	50	50	50	
Grab Strength	т	KN	2.9	3.4	4.55	7.15	
ASTM D 4632]	М	KIN	2.1	2.4	3.23	5.43	
rab Elongation	т	0/	60	60	60	60	
ASTM D 4632]	М	%	50	50	50	50	
Frapezoidal Tear	т		1.05	1.26	1.67	2.77	
ASTM D 4533]	М	KN	0.90	1.08	1.39	2.19	
CBR Burst Strength [ASTM D 6241]	т	KN(>=)	8.19	10.43	12.58	20.58	
	Μ	NN(~-)	6.78	8.67	10.57	16.89	
Puncture resistance	т	ZN (s-)	1.05	1.33	1.46	2.26	
ASTM D 4833]	М	KN(>=)	0.96	1.24	1.38	2.83	
ydraulic Properties							
Flow Rate, 100mm head		L/s/m ²	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 ₉₅ [ASTM D 4751]		microns≤	70	70	70	N/A	
Apparent Opening Size O ₉₀ [EN ISO 12956]		µm≤	105	105	104	N/A	
Permittivity[ASTM D 4491]		Sec ⁻¹	0.4	0.4	0.4	N/A	
hysical Identification Pro	perties						
Thickness (2KP)	т	mm	5.01	5.65	6.15	N/A	
ASTMD5199]	М		4.43	4.93	5.87	N/A	
Mass per Unit ASTM D5261]	Т	g/m²	800	1000	1200	2000	
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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