<u>Geofan</u>Tex[™] GFS Geotextile

Technical Data Sheet

GeofanTex[™] GFS in June 2019

GeofanTex™ GFS is 100% Polyester Staple Fiber Needle Punched non-woven Geotextile. The high-quality PET raw material offers the most cost-effective range of geotextiles bringing the maximum value to your project. Manufactured from short fibres that are crimped, this range of geotextile offers excellent energy absorption characteristics as well as superior filtration performance. GeofanTex™ GFS is suitable in many applications, including the following:

- Underside protection of geomembranes / GCLs in containment systems
- Filtration
- **Drainage and Separation**

GeofanTexTM GFS is manufactured in widths of 6mts, thus reducing wastage by fewer overlaps and allows rapid, easy installation.



Mechanical Properti	es				(T: T <u>)</u>	ypical value	M: Minim	um average	roll value)		
Properties	Unit	GFS	GFS	GFS	GFS	GFS	GFS	GFS	GFS	GFS	GFS
(Standard)		100	150	200	250	300	350	400	450	500	600
Tensile Strength	M KNI (m	3.6	4.5	7.5	10.0	13.0	14.0	16.4	18.0	20.0	28.0
[ASTM D 4595]	T KN/m	4.5	6.2	10.0	12.5	16.0	17.5	20.5	22.5	25.0	32.0
Tensile Elongation [ASTM D 4595]	M %	50	50	50	50	50	50	50	50	50	50
Grab Strength	M N	188	258	369	420	760	788	907	967	1045	1245
[ASTM D 4632]	Т	260	326	594	696	875	920	1043	1128	1259	1610
Grab Elongation [ASTM D 4632]	M %	50	50	50	50	50	50	50	50	50	50
Trapezoidal Tear	M N	112	120	188	200	246	267	288	311	377	488
[ASTM D 4533]	Т	130	145	209	250	315	357	360	414	441	629
CBR Burst Strength	M KN(>=)	0.45	0.64	1.44	1.53	1.88	2.40	2.80	3.20	3.76	4.40
[ASTM D 6241]	Τ	0.65	0.74	1.60	1.96	2.25	3.00	3.50	3.96	4.70	5.50
Puncture resistance	MN(>=)	184	276	368	460	552	644	656	828	920	1104
[ASTM D 4833]	T N(2-)	230	345	460	575	690	805	820	1035	1150	1380
Hydraulic Properties	5										
Flow Rate, 100mm head [ASTM D 4491]	L/s/m ²	161	142	106	85.5	75	61	53.2	50	48	44
Flow Rate, 50mm head	L/min/	5600	4735	3251	2922	2659	2397	2113	2045	2013	1976
[ASTM D 4491]	m²										
Permeability [ASTM D 4491]	(cm/s)	0.21	0.17	0.15	0.13	0.12	0.23	0.08	0.08	0.08	0.08
Apparent Opening Size O90 [ASTM D 4751]	mm	0.089	0.079	0.061	0.061	0.062	0.074	0.061	0.059	0.057	0.059
Apparent Opening Size O95 [ASTM D 4751]	mm	0.097	0.090	0.068	0.069	0.069	0.078	0.069	0.066	0.065	0.062
Physical Identification	on Propertie	es									
Thickness[ASTMD5199] (2)	(P) mm	1.0	1.7	2.1	2.4	2.5	2.8	3.0	3.2	3.5	3.6
Roll Width	m(≤)	6	6	6	6	6	6	6	6	6	6
Roll Length	m(≥)	375	250	185	150	125	105	95	85	75	70
Approx Load Q'ty per 40' HC) Sq. m	90000	60000	44400	36000	30000	25200	22800	20400	18000	16800

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 does not warrant its accuracy or completeness. The only warranty made by Geofantex Geosynthetics for its products 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 specifically disclaims all other warranties express or implied, including without agreed by Geofantex Geosynthetics and customer. Geofantex Geosynthetics specifically disclaims all other warranties, including without limitation, warranties of merchantability or fitness for a particular purpose, or rising from provision of samples, a course of dealing or usage of trade



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Mechanical Properties



Properties	Unit	GFS	GFS	GFS	GFS	GFS
(Standard)		800	1000	1200	1400	2000
Tensile Strength M		40.0	55.0	59.0	65.0	91.0
[ASTM D 4595] T	KN/m	52.0	61.0	64.0	70.0	99.0
Tensile Elongation [ASTM D 4595]	%	50	50	50	50	50
Grab Strength M	Ν	2019	3271	3351	3509	4513
[ASTM D 4632] T		2731	3622	3812	4047	5279
Grab Elongation [ASTM D 4632]	%	50	50	50	50	50
Trapezoidal Tear M	Ν	652	1155	1221	1325	1781
ASTM D 4533] T	IN	998	1422	1531	1656	2254
CBR Burst Strength M	KN(>=)	5.95	8.92	9.44	10.76	14.15
[ASTM D 6241] T	(////	6.88	9.40	9.80	11.20	14.60
lydraulic Properties						
Flow Rate, 100mm head	L/s/m ²	79	61	44	36	30
ASTM D 4491]	L/3/11		-			
Flow Rate, 50mm head	L/min/ m ²	2449	1710	1133	966	633
ASTM D 4491]						
Permeability [ASTM D 4491]	(cm/s)	0.35	0.33	0.32	0.30	0.29
Apparent Opening Size O90 ASTM D 4751]	mm	0.089	0.079	0.061	0.061	0.062
Apparent Opening Size O95 ASTM D 4751]	mm	0.097	0.090	0.068	0.069	0.069
Physical Identification F	roperties					
Thickness[ASTMD5199] (2KP) mm	4.8	5.7	6.1	7.4	9.5
Roll Width	m(≤)	4	4	4	4	4
Roll Length	m(≥)	57	45	38	32	23
Approx Load Q'ty per 40' HQ	Sq. m	13680	10800	9120	7680	5520

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