PRODUCT INFORMATION FB PLT8 (M5-ePM10-55)

Type of Nonwoven	Pleated filter media	
Filter layer	Polypropylene	
Material composition	PP Spunbond 20 g/m2 PP Meltblown 5 g/m2 Spunlaid Polyester 50 g/m2	
Recommendation for Application	ISO 16890	ISO ePM10 55%

Property	Method	Average
Basis -Weight	NWSP 130.1	75 g/m2 ± 5%
Initial Pressure Drop (0,16m/s)	NWSP 70.1	13 Pa
Standart width		710 mm
Maximum diameter		800 mm
Maximum length		1000 m

Efficiency	ISO 16890	ePM10	68 %
		ePM2,5	53 %
		ePM1	48 %
		ePM10 min	59 %
		ePM2,5 min	18 %
		ePM1 min	8 %
Flammability	DIN 53438	F1/F1/K1	

This information is provided in good faith but FIBERTON cannot guarantee its accuracy or completeness. The end user is advised to evaluate the product and use it only in compliance with all applicable laws and regulations. This is not a specification. Properties are given as typical values. Thickness measured under relaxed conditions. May vary after packaging, storage and transport. Filtration values shown in table above is for fully manufactured products.

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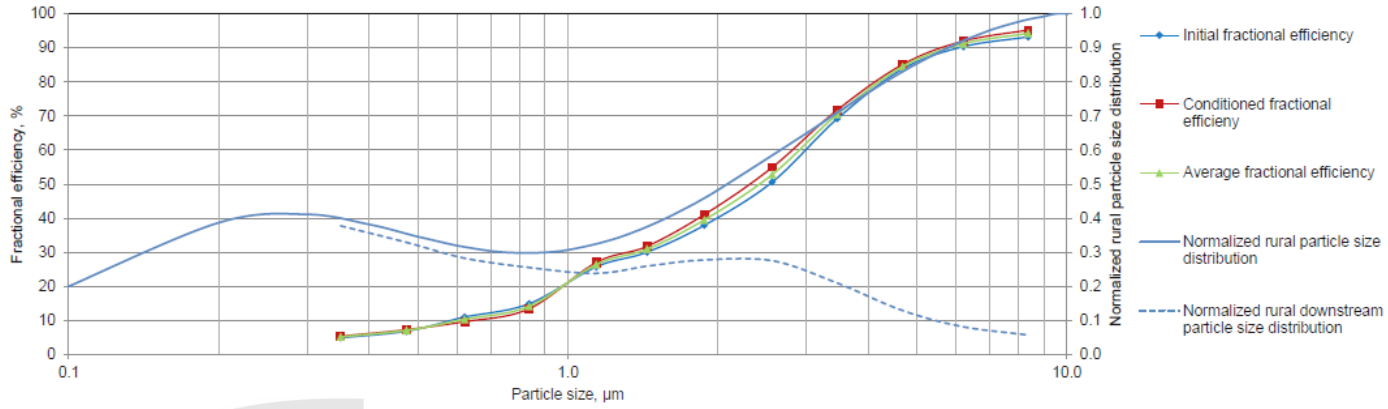

Particle size			Urban size distribution					Rural size distribution			Fractional efficiency		
Δd_i µm	$\bar{d}_i$ µm	$\Delta \ln d_i$ µm	$q_{3u}(\bar{d}_i)$	$q_{3u}(\bar{d}_i)$* $\Delta \ln d_i$	E_i*$q_{3u}(\bar{d}_i)$ *$\Delta \ln d_i$	$E_{D,i}$*$q_{3u}(\bar{d}_i)$ *$\Delta \ln d_i$	$E_{A,i}$*$q_{3u}(\bar{d}_i)$ *$\Delta \ln d_i$	$q_{3r}(\bar{d}_i)$	$q_{3r}(\bar{d}_i)$* $\Delta \ln d_i$	$E_{A,i}$*$q_{3r}(\bar{d}_i)$ *$\Delta \ln d_i$	Sample 1 %	Sample 2 %	Average %
0.30 - 0.41	0.35	0.31237	0.22568	0.070498	0.003485	0.003818	0.003651	0.093806	0.029303	0.001518	5	5	5
0.41 - 0.55	0.47	0.29376	0.19732	0.057965	0.003992	0.004234	0.004113	0.083478	0.024522	0.001740	7	7	7
0.55 - 0.70	0.62	0.24116	0.15837	0.038193	0.004187	0.003691	0.003939	0.074324	0.017924	0.001849	11	10	10
0.70 - 1.00	0.84	0.35667	0.11522	0.041097	0.006130	0.005523	0.005827	0.070137	0.025016	0.003547	15	13	14
1.00 - 1.30	1.14	0.26236	0.08503	0.022309	0.005746	0.006019	0.005883	0.076281	0.020013	0.005277	26	27	26
1.30 - 1.60	1.44	0.20764	0.07618	0.015817	0.004752	0.005031	0.004891	0.088326	0.018340	0.005672	30	32	31
1.60 - 2.20	1.88	0.31845	0.08022	0.025546	0.009688	0.010475	0.010081	0.108042	0.034406	0.013578	38	41	39
2.20 - 3.00	2.57	0.31015	0.09984	0.030966	0.015687	0.017017	0.016352	0.137262	0.042573	0.022481	51	55	53
3.00 - 4.00	3.46	0.28768	0.12688	0.036500	0.025247	0.026185	0.025716	0.167084	0.048067	0.033866	69	72	70
4.00 - 5.50	4.69	0.31845	0.15556	0.049537	0.041524	0.042178	0.041851	0.195424	0.062233	0.052577	84	85	84
5.50 - 7.00	6.20	0.24116	0.17757	0.042823	0.038674	0.039396	0.039035	0.216707	0.052261	0.047639	90	92	91
7.00 - 10.00	8.37	0.35667	0.19157	0.068329	0.063680	0.065050	0.064365	0.231428	0.082545	0.077756	93	95	94

Particulate matter efficiencies		
$ePM_{1,ini}$	$ePM_{1,min}$	ePM_1
9 %	8 %	8 %
		-
$ePM_{2.5,ini}$	$ePM_{2.5,min}$	$ePM_{2.5}$
18 %	18 %	18 %
		-
$ePM_{10,ini}$	$ePM_{10,min}$	ePM_{10}
58 %	59 %	59 %
		ePM_{10} 55 %

Symbols and units

Δd_i	Particle size range, µm
$\bar{d}_i$	Geometric mean diameter of a size range *i*, µm
$\Delta \ln d_i$	Logarithmic width of particle diameter size range *i*
$q_{3u}(\bar{d}_i)$	Discrete urban particle volume distribution, dimensionless
$q_{3r}(\bar{d}_i)$	Discrete rural particle volume distribution, dimensionless
E_i	Initial fractional efficiency of particle size range *i* of the untreated and unloaded filter element, %
$E_{D,i}$	Fractional efficiency of particle size range *i* of the filter element after an artificial conditioning step, %
$E_{A,i}$	Average fractional efficiency of particle size range *i*, %
$ePM_{x,ini}$	Initial particulate matter efficiency value of the clean filter, %
$ePM_{x,min}$	Minimum particulate matter efficiency value of the conditioned filter, %
ePM_x	Particulate matter efficiency, %

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