

Air filters by filter classes



Filter application		Particulate air filters for general ventilation								EPA, HEPA and ULPA						
Test		EN 779:2012 evaluation of filter performance at 0,944 m³/s (or nominal flow)								EN 1822:2011 (Part 1 to 5) Evaluation of filter performance by nominal flow						
Suitable for	Group designation	Filter classes	Test dust / aerosol	Final pressure drop in Pa	Average arrestance (A_m) compared with test dust in %	Average efficiency (E_m) for particles of 0.4 microns in %	Minimum efficiency for particles 0.4 microns in %	Previous: DIN EN 779:2003 (Predecessor: DIN 24185)	Filter classes	Test dust	Integral value of separation in the MPPS in %	Integral value of transmittance in the MPPS in %	Local value of separation in the MPPS in %	Local value of transmittance in the MPPS in %	Previous: DIN EN 1822:1998 (Predecessor DIN 24184)	
2 nd filter stage (fine filtration)	1 st filter stage (prefiltration)	Coarse dust	G	G 1	ASHRAE dust (72% fine test dust ISO 12103-1:1997 A2 23% carbon black and 5% cotton linters)	250	$50 \leq A_m < 65$		-	G 1						
				G 2		250	$65 \leq A_m < 80$		-	G 2						
				G 3		250	$80 \leq A_m < 90$		-	G 3						
				G 4		250	$90 \leq A_m$		-	G 4						
	Fine dust	M	M 5	DEHS (Di-Ethyl-Hexyl-Sebacate) 0.2-3.0 µm	450	-	$40 \leq E_m < 60$	-	F 5							
			M 6		450	-	$60 \leq E_m < 80$	-	F 6							
		F	F 7		450	-	$80 \leq E_m < 90$	35	F 7							
			F 8		450	-	$90 \leq E_m < 95$	55	F 8							
			F 9		450	-	$95 \leq E_m$	75	F 9							
	3 rd filter stage (final filtration)	Suspended dust	E	EPA: Efficient Particulate Air filter						E 10	DEHS (Di-Ethyl-Hexyl-Sebacate) MPPS 0.1-0.3 µm	≥ 85	≤ 15	-	-	H 10
				E 11	≥ 95	≤ 5	-	-	H 11							
				E 12	≥ 99.5	≤ 0.5	-	-	H 12							
H			H 13	≥ 99.95	≤ 0.05	≥ 99.75	≤ 0.25	H 13								
			H 14	≥ 99.995	≤ 0.005	≥ 99.975	≤ 0.025	H 14								
U			U 15	≥ 99.9995	≤ 0.0005	≥ 99.9975	≤ 0.0025	U 15								
			U 16	≥ 99.99995	≤ 0.00005	≥ 99.99975	≤ 0.00025	U 16								
U 17	≥ 99.999995	≤ 0.000005	≥ 99.9999	≤ 0.0001	U 17											

www.freudenberg-filter.com

