SARTURIUS

Simplifying Progress

Depth Filters - Specifications



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Quantitative Filter Papers

Grade	Weight g/m²	Thickness (mm)	Filtration Time (s)*	Particle retention (µm)	Precipitates	Properties
388 (black dot)	84	0.21	10	12 - 15	Coarse crystalline	Fast filtration
389 (white dot)	84	0.19	20	8 - 12	Medium-fine crystalline	Medium-fast filtration, fat-free
392 (red dot)	84	0.17	50	5 - 8	Fine crystalline	Medium-fast filtration
390 (green dot)	84	0.16	100	3 - 5	Fine crystalline	Slow filtration
391 (blue dot)	84	0.15	180	2-3	Very fine crystalline	Very slow filtration
393 (purple dot)	100	0.18	300	1-2	Very fine crystalline	Very slow filtration





 $^{^{\}star}$ Time required to filter 10 mL of distilled water at 20 $^{\circ}$ C through a 110 mm folded filter

Qualitative Filter Papers

Grade	Material	Weight g/m²	Thickness (mm)	Wet bursting strength (kPa)	Ash content (%)	Wet strength	Particle retention (µm)	Properties
1288	Refined pulp and Linters	84	0.21	≥ 30	< 0.1	Х	12 -15	Wide pored, fast rate of filtration
1289	Refined pulp and Linters	84	0.21	≥ 30	< 0.1	Х	8 -12	Medium-wide pored, medium-fast rate of filtration
1292	Refined pulp and Linters	84	0.17	≥ 30	< 0.1	х	5 -8	Medium pored moderately fast rate of filtration
1290	Refined pulp and Linters	84	0.15	≥ 30	< 0.1	X	3 -5	Narrow pored, slow rate of filtration
1291	Refined pulp and Linters	84	0.15	≥ 30	< 0.1	Х	2 -3	Fine pored, very slow rate of filtration
293	Refined pulp and Linters	80	0.15	≥ 20	< 0.1	х	1-2	Very fine pored, very slow rate of filtration
131	Refined pulp and Linters	80	0.16	20	< 0.02		3 -5	Narrow pored, slow rate of filtration
132	Refined pulp and Linters	80	0.17	20	< 0.02		5 -8	Medium pored, medium-slow rate of filtration
292	Cotton Linters	87	0.18	5	< 0.06		5 -8	Medium pored, medium-slow rate of filtration
292a	Cotton Linters	97	0.19	5	< 0.06		4 -7	Medium to narrow pored, medium-slow rate of filtration







Qualitative - Technical Filter Papers, Smooth

Grade	Weight g/m²	Thickness (mm)	Filtration Time (s)*	Particle retention (µm)	Wet Bursting Strength (kPa)	Color	Properties
6	80	0.17	15	10 - 13	≥30	White	Medium-fast filtration
3 w	65	0.14	15	9 - 13	≥15	White	Medium-fast filtration
3 hw	65	0.14	20	8 - 12	≥15	White	Medium-fast filtration
C 140	140	0.30	20	7 - 11	> 50	White	Medium-fast filtration
4 b	75	0.15	22	8 - 12	≥30	White	Medium-fast filtration
3 m/N	65	0.14	30	7 - 10	≥30	White	Medium-fast filtration
100/N	85	0.18	30	6 - 8	≥ 80	White	Medium-fast filtration, low ammonium, potassium & sodium content
918	85	0.17	45	8 - 10	n/a	Black	Medium-fast to slow filtration, black paper, stained with a sulfur coloring
3 S/h	200	0.36	55	5 - 7	≥ 15	White	Medium-fast to slow filtration

 $^{^{\}star}$ Time required to filter 10 mL of distilled water at 20°C through a 110 mm folded filter





Qualitative - Technical Filter Papers, Creped

Grade	Weight g/m²	Thickness (mm)	Filtration Time (s)*	Wet Bursting Strength (kPa)	Air Resistance (mbar)	Properties
5 H/N	85	0.28	3	≥ 40	n/a	Very fast filtration, wide-pore
34/N	80	0.25	5	≥ 50	2.0	Very fast filtration
37/N	135	0.50	4	≥ 70	1.9	Very fast filtration
1602/N	70	0.23	5	≥30	n/a	Very fast filtration
39/N, 180 g	180	0.65	5	≥ 90	2.5	Very fast filtration
39/N, 300 g	300	0.95	5	≥ 120	2.5	Very fast filtration
603/N	75	0.25	8	≥ 50	n/a	Fast filtration
6 S/N	145	0.55	12	≥90	n/a	Medium-fast filtration
601/N	65	0.19	13	≥30	n/a	Medium-fast filtration, for sugar industry

 $^{^{\}star}$ Time required to filter 10 mL of distilled water at 20°C through a 110 mm folded filter





Absorptive Filter Papers and Cardboards

Grade	Weight g/m²	Thickness (mm)	Filtration Time (s)*	Wet Bursting Strength (kPa)	Dry bursting strength (kPa)	Air Resistance (mbar)	Capillary Rise (mm/ 10 min)	Water Capacity (%)	Properties
C 160	160	0.30	40	> 50		25	80		Filtration of fine-flaked precipitates
1339	315	0.63		≥230	≥ 500	42	≥ 60		Raw paper for Bowie-Dick-test indicator sheets, sterilization control
C 350L	360	0.75		≥200		30	80		Antibiotic testing paper, ash content < 0.08 %
151	460	1.00			≥ 400	19	120		Base paper for cyto-strips
1220	475	1.00	200				120		Filtration of essential oils, galvanic baths, use in filter presses, ash content of 0.15 %
157	700	1.8				8	150		Filtration of edible oils, essential oils, fine turbidity
SEK 770	800	1.00						≥ 500	Absorbent paper board for the transport of liquids

^{*}Time required to filter 10 mL of distilled water at 20°C through a 110 mm folded filter





Blotting and Chromatography Papers

Grade	Weight g/m²	Thickness (mm)	Capillary Rise (mm/10 min)	Capillary Rise (mm/30 min)	Ash Content	pH Value	Properties
BF2	195	0.35	70	115			Blotting paper
BF3	330	0.76	130				Blotting paper
BF4	550	1.30	160				Blotting paper
FN3	90	0.19		95	≤ 0.04	7	Blotting & Chromatography paper, medium-fast absorption
FN 4	125	0.24		95	≤ 0.04	7	Blotting & Chromatography paper, medium-fast absorption
FN7	150	0.32		145	≤ 0.04	7	Blotting & Chromatography paper, fast absorption
FN 30	320	0.90		240	≤ 0.05	7	Blotting & Chromatography paper, very fast absorption
FN 100	195	0.35	70	115	≤ 0.04	7	Blotting & Chromatography paper, fast absorption





Seed Germination Test Papers

Grade	Weight (g/m²)	Thickness (mm)	Color	Wet Bursting Strength (kPa)	Water Absorption (g/100 cm²)	ISTA Test Method	Properties
20	110	0.22	White			PP	Pleated strips, white, 2,000 x 110 mm
20, gray	110	0.22	Gray			PP	Pleated strips, gray, 2,000 x 110 mm
4 b	75	0.15	White	≥ 30		PP	Wrapping strips
6	80	0.17	White	≥ 30		PP	Wrapping strips
C 140	140	0.30	White	≥ 50		TP	Smooth paper
6 S/N	145	0.55	White	≥ 90		TP	Creped paper
193	160	0.32	Yellow			TP	Smooth paper
191	700	1.35	Light Blue	≥ 50	12.8	TP	Smooth paper
39/N	180	0.62	White			BP	Creped paper





Special Papers

Grade	Material	Weight (g/m²)	Thickness (mm)	Water Absorption (%)	Properties
LabSorb	Polyethylene-coated paper	140		150	Polyethylene-coated paper for surface protection
Labsorb Ultra	Polyethylene-coated paper	187		300	Polyethylene-coated paper with high water absorption
480	Silicone-impregnated paper	85	0.19		Hydrophobic phase separating paper for the filtration of solvents
470	Cellulose & diatomaceous earth	140	0.32		Diatomaceous earth filter paper for the filtration of fine precipitates – slow filtration: 80 s
605	Parchment paper	23	0.07		Smooth, soluble for weighing solid particles
2113	Non-linting silk paper	13			Very thin and soft lit-free paper for the cleaning of optical surfaces such as lens and mirrors of microscopes, cuvettes







eShop (LabSorb)



eShop (LabSorb Ultra)



eShop (480)



eShop (470)



Learn More

Glass Microfiber Filters with Binder

Grade	Weight (g/m²)	Thickness (mm)	Penetration 0.3 µm (%)	Pressure Drop at 5.3 cm/s (Pa)	Binding Agent	Temperature Resistance (°C)	Applications
13430	220	1.25	< 0.02		Hydrophilic	180 °C	Prefiltration
13400	73	0.39	< 0.015		Hydrophilic	180 °C	Prefiltration
MG 1387/1	90	0.38	< 0.003	400	Hydrophilic	220°C	Gas monitoring, sample preparation
MG 227/1/60	60	0.32	< 0.5		Hydrophobic	220 - 250°C	Air pollution control
MG 400 XA	75	0.35	< 0.001	425	Hydrophobic	180 °C	Air sampling for collection of atmospheric particulates and aerosols





Glass Microfiber Filters without Binder

Grade	Weight (g/m²)	Thickness (mm)	Penetration 0.3 µm (%)	Particle Retention in Liquids (µm)	Filtration Time (mL/min)	Fulfills requirements in EN 872:2005 (weigh loss)	Temperature Resistance (°C)	Applications
MGA	54	0.23	< 0.001	1.6	510	yes	500	Clarification of buffer and reagent solutions. Air and water pollution monitoring
MGB	143	0.70	< 0.001	1.0	210		500	Prefiltration of large volumes
MGC	54	0.24	< 0.001	1.2	335	yes	500	Analysis of suspended solids in wastewater according to EN 872:2005
MGD	120	0.47	< 0.1	2.7	920		500	Prefiltration
MGF	75	0.38	< 0.001	0.7	110		500	Clarification of protein solutions, filtration of liquids prior to HPLC, TCLP Testing
MGG	65	0.27	< 0.001	1.5	600		500	Filtration of gasses and liquids
13440	88	0.44		0.7	120	yes	500	Prefiltration
MG 160	75	0.35	< 0.002	1.2	400		500	Air monitoring; PM-10 sampling
MG 550-HA	65	0.27		1.5	500		550	Analysis of suspended solids in wastewater according to 2540D





Quartz Microfiber Filters

Grade	Weight g/m²	Thickness (mm)		•	Dry tensile strength, longitudinal (N/m)	Dry tensile strength, crosswise (N/m)	Temperature Resistance	Pre-heated
Q3400	85	0.43	< 0.002	450	200	80	900 °C +/-10 %	yes
T 293	85	0.43	< 0.002	450	150	70	900 °C +/-10 %	no





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