

# Qualitative Filter Papers



## Standard Qualitative Filter Papers

Standard Qualitative Filter Papers are used for low gravity, or even quadrant-folded application. Standard Filter Papers have a higher level of  $\alpha$ -cellulose than other filter papers, this means that it will weaken when the paper has become introduced to water. We do not recommend Standard Filter Papers if wet handling or vacuum work is necessary. In routine quadrant-folded applications the underline strength of standard (untreated) grades does not present an issue.

Grade	Whatman Equivalent	Speed	Thickness (mm)	Pore Size ( $\mu\text{M}$ )	Weight ( $\text{g}/\text{m}^2$ )	Filtration Speed (sec)	Burst Strength ( $\text{kg}/\text{cm}^2$ )
301	= No.5	Very Slow Filtering	0.14	2-3	84	180	> 0.30
302	= No.3	Medium Filtering	0.3	12-16	150	65	3.90
303	= No.2	Medium Filtering	0.16	5-8	87	50	> 0.10
304	= No.1	Medium Filtering	0.16	5-13	73	88	1.95
305	= No.4	Fast Filtering	0.20	12-15	84	10	> 0.30

## Wet-strengthened Qualitative Filter Papers

Wet-strengthened filter papers are manufactured from a majority of alpha-cellulose. The smooth surface allow a fibre free filtration. They feature a high wet strength and can also be used in the filtration of strong alkaline or acid solutions. Due to their high mechanical strength, they are suited to applications where the residue is removed from the filter, for example with a spatula or jet of water.

Grade	Whatman Equivalent	Speed	Thickness (mm)	Pore Size ( $\mu\text{M}$ )	Weight ( $\text{g}/\text{m}^2$ )	Filtration Speed (sec*)	Burst Strength ( $\text{kg}/\text{cm}^2$ )
322	= No.93	Fast Filtration	0.15	10-20	64	50	1.45
323	= No.91	Fast Filtration	0.09	8-10	75	50	1.45
324	= No.113	Fast, creped	0.43	20	130	50	1.45
325	= No.114	Very Fast Filtration	0.17	17-30	73	22	1.25

# Quantitative Filter Papers



## Ashless Filter Papers

These standard Ashless grades are very pure filters suitable for routine quantitative gravimetric techniques and in the preparation of samples for use in analysis involving instrumental techniques. Johnson Test Papers offers a complete range of Ashless Quantitative Cellulose Filter Papers with a choice of pore size, filtration speeds, and filter thickness's. They are available in different filter sizes from small circle formats to large sheets. We can also make custom sized filters to meet your specific needs.

Grade	Whatman Equivalent	Speed	Thickness (mm)	Pore Size ( $\mu\text{M}$ )	Weight ( $\text{g}/\text{m}^2$ )	Filtration Speed (sec*)	Burst Strength ( $\text{kg}/\text{cm}^2$ )
351	= No.42	Very Slow Filtering	0.14	2-3	84	180	> 0.20
352	= No.40	Medium Filtering	0.16	5-8	84	50	> 0.20
353	= No.43	Medium Fast filtering	0.17	8-12	84	20	< 0.20
354	= No.41	Fast Filtering	0.18	12-15	84	10	> 0.20

## Hardened Ashless Filter Papers

These wet strengthened hard filter papers are manufactured from refined pulp and linters and have a low ash content of <0.01%. These specially treated hardened ashless grades are available for critical quantitative analytical techniques requiring increased wet-strength and handling capacity. These high purity filter papers have a tough, smooth surface free of loose fibres and are ideal for a range of critical filtration procedures such as collecting wet precipitates in pressure filtrations or in Buchner funnels in gravimetric analysis of samples. The smooth surface of the filter allows the recovery of most precipitates without the fibres adhering to them. Due to their high mechanical strength in wet conditions they are particularly suited for applications, where the residue is removed from the filter.

Grade	Whatman Equivalent	Speed	Thickness (mm)	Pore Size ( $\mu\text{M}$ )	Weight ( $\text{g}/\text{m}^2$ )	Filtration Speed (sec*)	Burst Strength ( $\text{kg}/\text{cm}^2$ )
371	= No.50	Slow	0.25	7-9	80	180	>0.3
372	= No.52	Medium	0.27	8-12	80	50	>0.3
373	= No.54	Fast	0.29	12-16	80	10	>0.3

# Microfibre Filters

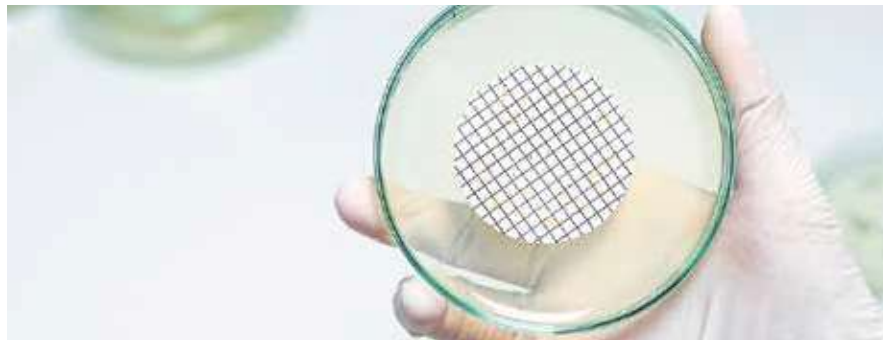
Grade	Whatman Equivalent	Speed	Thickness (mm)	Pore Size ( $\mu\text{M}$ )	Weight ( $\text{g}/\text{m}^2$ )	Filtration Speed (sec)	Burst Strength ( $\text{Kg}/\text{cm}^2$ )
50A	= GFA	Fast, high loading	0.26	1.6	52	60	20
50B	= GFB	Medium / Fast, very high loading	0.70	1.0	143	200	50
50C	= GFC	Medium / Fast, very high loading	0.26	1.2	52	100	20
50D	= GFD	Slow, very high loading	0.53	2.7	120	30	20
50AH	= 934 AH	Fast	0.28	1.5	65	60	20

## Quartz Microfibre Filters - binder free

Johnson Test Papers offers extremely pure 100% quartz filters with temperature stability up to 900°C which makes these filters ideal for use in applications like hot stack measurements. The heat conditioned QF889 grade is the first choice when the highest level of purity is required like for trace element analysis. QF890 is recommended for PM10 monitoring according to EPA standards and ISO 23210.

Grade	Efficiency (%)	Weight ( $\text{g}/\text{m}^2$ )	Temperature ( $^{\circ}\text{C}$ )	Pressure Drop (mbar)
QF889	99.95	85	900	51.5
QF890	99.95	85	900	51.5

# Micro Filtration



Polymer	Grid Colour	Pore Size ( $\mu\text{M}$ )	Diameter
Cellulose Nitrate (CN)	White	0.22	47
Cellulose Nitrate (CN)	White	0.45	47
Mixed Cellulose Esters (MCE)	White/Black	0.22	47
Mixed Cellulose Esters (MCE)	White/Black	0.45	47

## Non-Sterile Membrane Filters

Johnson Test Papers supplies a wide range of plain white non-sterile microfiltration membranes used to collect or remove particles and microorganisms from various organic solvents and aqueous solutions. Sold by pack of 100 filters.

Polymer	Pore Size ( $\mu\text{M}$ )	Diameter
Cellulose Acetate (CA)	0.22	47
Cellulose Acetate (CA)	0.45	47
Cellulose Nitrate (CN)	0.22	47
Cellulose Nitrate (CN)	0.45	47
Mixed Cellulose Esters (MCE)	0.22	47
Mixed Cellulose Esters (MCE)	0.45	47
Nylon	0.22	47
Nylon	0.45	47
PTFE	0.22	47
PTFE	0.45	47
Regenerated Cellulose (RC)	0.22	47
Regenerated Cellulose (RC)	0.45	47

# Syringe Filters



Polymer	Diameter (mm)	Filtration area (cm <sup>2</sup> )	Pore Size (µM)	Held-up Volume (µL)	Housing	Sterile/Non-sterile
Mixed Cellulose Ester (MCE)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
Mixed Cellulose Ester (MCE)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
Polyethersulfone (PES)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
Polyethersulfone (PES)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
Cellulose Acetate (CA)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
Cellulose Acetate (CA)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
Nylon (Polyamide)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
Nylon (Polyamide)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
PVDF	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
PVDF	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
PVDF-D (Hydrophobic)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
PVDF-D (Hydrophobic)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
PTFE-H (Hydrophilic)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
PTFE-H (Hydrophilic)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile
PTFE-D (Hydrophobic)	13mm	1.09	0.22/0.45	<20	PP	Sterile/Non-sterile
PTFE-D (Hydrophobic)	25mm	4.08	0.22/0.45	<100	PP	Sterile/Non-sterile

# pH Indicator Strips (non-bleeding)



Our broad range of pH strips offer a solution for every application

Ref	Product Description	pH Graduations	Presentation
140.4	Universal Indicator Strips pH 0-14	0-1-2-3-4-5-6-7-8-9-10-11-12-13-14	100 strips
103.3C	pH Indicator Strips pH 0-6.0	0-0.5-1.0-1.5-2.0-2.5-3.0-3.5-4.0-4.5-5.0-5.5-6.0	100 strips
106.3C	pH Indicator Strips pH 4.0-10.0	4.0-4.5-5.0-5.5-6.0-6.5-7.0-7.5-8.0-8.5-9.0-9.5-10.0	100 strips
109.3C	pH Indicator Strips pH 7.0-14.0	7.0-7.5-8.0-8.5-9.0-9.5-10.0-10.5-11.0-11.5-12.0-12.5-13.0-13.5-14.0	100 strips
113.3C	pH Indicator Strips pH 2.0-9.0	2.0-2.5-3.0-3.5-4.0-4.5-5.0-5.5-6.0-6.5-7.0-7.5-8.0-8.5-9.0	100 strips
121.2C	pH Indicator Strips pH 0-1.5	0-0.3-0.5-0.8-1.0-1.5	100 strips
122.2C	pH Indicator Strips pH 0-2.5	0-0.5-1.0-1.3-1.6-1.9-2.2-2.5	100 strips
114.2C	pH Indicator Strips pH 2.5-4.5	2.5-3.0-3.3-3.6-3.9-4.2-4.5	100 strips
125.2C	pH Indicator Strips pH 4.0-7.5	4.0-4.3-4.6-4.9-5.2-5.5-5.8-6.1-6.4-6.7-7.0-7.5	100 strips
126.2C	pH Indicator Strips pH 5.0-9.0	5.0-5.5-6.0-6.5-7.0-7.5-8.0-8.5-9.0	100 strips
127.2C	pH Indicator Strips pH 6.5-10.0	6.5-6.8-7.1-7.4-7.7-7.9-8.1-8.3-8.5-8.7-9.0-9.5-10.0	100 strips
110.3C	pH Indicator Strips pH 11.0-13.0	11.0-11.5-11.8-12.1-12.3-12.5-12.8-13.0	100 strips

# J-QUANT® test strips



Ref	Product Description	Graduations	Presentation
210.1	J-QUANT® Ammonium 400	0 - 10 - 25 - 50 - 100 - 200 - 400 mg/L NH <sup>4+</sup>	100 strips
212.1	J-QUANT® Ascorbic Acid 2000	0 - 50 - 100 - 200 - 300 - 500 - 700 - 1000 - 2000 mg/L	100 strips
214.1	J-QUANT® Carbonate Hardness	0 - 5 - 10 - 15 - 20 - 30 °d	100 strips
161.1C	J-QUANT® Chlorine 5	0 - 0.5 - 1 - 3 - 5 mg/L	100 strips
216.1	J-QUANT® Chlorine 20	0 - 0.5 - 1 - 3 - 5 - 10 - 20 mg/L	100 strips
163.1C	J-QUANT® Chlorine 300	0 - 25 - 50 - 100 - 200 - 300 mg/L	100 strips
164.1C	J-QUANT® Chlorine 1000	0 - 50 - 100 - 250 - 500 - 1000 mg/L	100 strips
250.1	J-QUANT® Copper 300	0-10-30-100-300 mg/L	100 strips
173.5C	J-QUANT® Fluoride 100	0 - 10 - 25 - 50 - 100 mg/L	100 strips
230.1	J-QUANT® Glucose 500	0 - 10 - 25 - 50 - 100 - 250 - 500 mg/L	100 strips
238.1	J-QUANT® Glucose 2000	0 - 100 - 250 - 500 - 1000 - 2000 mg/dL	100 strips
236.1	J-QUANT® Iodine 225	0 - 50 - 75 - 150 - 225 mg/L	100 strips
248.1	J-QUANT® Iron 500	0-3-10-25-50-100-250-500 mg/L	100 strips
176.5C	J-QUANT® Nitrate 500	0 - 10 - 25 - 50 - 250 - 500 mg/L	100 strips
175.5C	J-QUANT® Nitrite 25	0 - 0.5 - 1 - 5 - 10 - 25 mg/L	100 strips
218.1	J-QUANT® Nitrite 80	0 - 2 - 5 - 10 - 20 - 40 - 80 mg/L	100 strips
242.1	J-QUANT® Nitrate/Nitrite 500/25	0-10-25-50-100-250-500 mg/L NO <sub>3</sub> <sup>+</sup> 0-0.5-1-5-10-25 mg/L NO <sub>2</sub> <sup>+</sup>	100 strips
254.1	J-QUANT® Nitrate/Nitrite 500/80	0-10-25-50-100-250-500 mg/L NO <sub>3</sub> <sup>+</sup> 0-2-5-10-20-40-80 mg/L NO <sub>2</sub> <sup>+</sup>	100 strips
167.5C	J-QUANT® Peracetic Acid 50	0 - 5 - 10 - 20 - 30 - 50 mg/L	100 strips
168.5C	J-QUANT® Peracetic Acid 500	0 - 100 - 150 - 200 - 250 - 300 - 400 - 500 mg/L	100 strips
228.1	J-QUANT® Peracetic Acid 2000	0 - 500 - 1000 - 1500 - 2000 mg/L	100 strips
220.1	J-QUANT® Peroxide 25	0 - 0.5 - 2 - 5 - 10 - 25 mg/L	100 strips
165.5C	J-QUANT® Peroxide 100	0 - 1 - 3 - 10 - 30 - 100 mg/L	100 strips
222.1	J-QUANT® Peroxide 1000	0 - 100 - 200 - 400 - 600 - 800 - 1000 mg/L	100 strips
224.1	J-QUANT® Phosphate 500	0 - 3 - 10 - 25 - 50 - 100 - 250 - 500 mg/L	100 strips
160.5	J-QUANT® QAC 400R	0 - 100 - 200 - 300 - 400 mg/L Benzalkonium chloride	5m roll
160.1	J-QUANT® QAC 400	0 - 100 - 200 - 300 - 400 mg/L Benzalkonium chloride	100 strips
160.2	J-QUANT® QAC 25-1000	0 - 25 - 50 - 100 - 250 - 500 - 1000 mg/L Benzalkonium chloride	100 strips
160.3	J-QUANT® QAC 200-1000	0 - 200 - 400 - 600 - 800 - 1000 mg/L Benzalkonium chloride	100 strips
012.1	J-QUANT® Silver 10	0 - 1 - 1.75 - 2.75 - 3.5 - 5 - 7 - 10 g/L	100 strips
172.5C	J-QUANT® Sulphite 500	0 - 10 - 25 - 50 - 100 - 250 - 500 mg/L	100 strips
020.5	J-QUANT® Total Chlorine 200	0 - 10 - 25 - 50 - 100 - 200 mg/L	5m roll
185.1C	J-QUANT® Water Hardness 500	0 - 50 - 125 - 250 - 500 mg/L CaCO <sub>3</sub>	100 strips
226.1	J-QUANT® Water Hardness 21	3 - 4 - 7 - 14 - 21 °d CaCO <sub>3</sub>	100 strips
240.1	J-QUANT® Water Hardness 25	0 - 5 - 10 - 15 - 20 - 25 °d CaCO <sub>3</sub>	100 strips
232.1	Swimming Pool Test 5 in 1		100 strips
234.1	Swimming Pool Test 3 in 1		100 strips