

Performance you can trust!



K&R Filter GmbH

Supplying Performance!

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Greeting

Dear Customer,

We are very pleased to introduce to you our first product catalogue.

K&R Filter may be a new name on the filtration world horizon, but we base this company on solid professional and market experience in the filtration and separation business of several decades. It is particularly important to us to offer you an attractive product range, technical competence as well as flexibility in service.

Moreover, our focus is on being a competent and reliable partner for our customers, to take their requests and concerns seriously and to build up a relationship with them that is characterized by humanity and a high degree of mutual trust.

This present catalogue gives you an insight into our entire product range. It is subdivided into 5 categories:

- Laboratory Products
- Environmental Monitoring
- Industrial Filtration
- Medical Products
- Technical Information

Our products are being distributed worldwide through local dealers. Of course, you can also contact us directly. It will be our pleasure to provide you with further information.

We look forward to establishing a longstanding partnership with you!

Cordially yours,

Antonio Rebeggiani
CEO
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Chemnitz, Germany

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Laboratory Filter Papers



Even in our time of high technology, classical filter papers are being used in many chemical, biological and research laboratories around the world.

More often than not they are a piece of 'high-tech' themselves. Made of fibre configurations of different materials such as α -cellulose, cotton linters, micro-glass and micro-quartz, they have been designed to retain particles that are not even visible to the human eye.

K&R Filter supplies an extensive range of laboratory filters that are made from the finest available raw materials on the market. Our products are subject to a thorough quality control ensuring consistency in performance. Therefore, we can rightly claim that we can meet most every laboratory filtration requirement with our product portfolio.

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Guide for Filter Papers

Analytical Filter Papers

	Quantitative Filter Paper - Ashless Hardened	Qualitative Filter Papers - High-Purity		
		Non- Hardened	Hardened	
1. Very fast Filtration	100		203	Fibre Matrix open
2. Fast Filtration	101		204	Fibre Matrix open to semi-open
3. Medium Filtration		201		Fibre Matrix semi-open to open
	102	200	205	
4. Slow Filtration			206	Fibre Matrix medium-tight
	103		207	
5. Very slow Filtration	105			Fibre Matrix very tight

Guide for Filter Papers

General Purpose

	Qualitative-Technical Filter Paper	
1. Very fast Filtration	337 (creped), 338 (creped)	Fibre Matrix open
2. Fast Filtration	213	Fibre Matrix open to semi-open
3. Medium Filtration	215	Fibre Matrix semi-open to open
	210	
	214	
4. Slow Filtration		Fibre Matrix medium-tight
5. Very slow Filtration		Fibre Matrix very tight





Laboratory Filter Papers

Quantitative Filter Papers

Quantitative filter papers are used in applications where you want to find out how much of a certain substance is included in the specimen to be tested.

These highly pure filter papers are made from α -cellulose and cotton linters and in a second step they have been purified in an acid bath in order to eliminate excessive impurities and trace elements. The final quantitative filter paper is also called ashless paper because the ash content is lower than 0.01% which is important to avoid false test results during subsequent analysis.

K&R Filter offers a full line of excellent quantitative filters ranging from papers with an open fibre structure for the filtration of coarse and voluminous precipitates to papers with a very tight fibre matrix for the capture of very fine-grained precipitates.

Features of Quantitative Filter Papers

1. Made of 100% cotton linters
2. Ash-free (Ash content $\leq 0.01\%$ according to DIN 54370)
3. Wet-strengthened
4. Supplied in rolls, sheets, discs and folded filters

Applications for Quantitative Filter Papers

1. Gravimetrical analysis of metal content in mining industry (molybdenum, lead, zinc etc.)
2. Sulphur content determination in cement industry
3. Analysis of ores, pig iron and steel (Determination of Silicon content)
4. Determination of insoluble contaminants in animals' and plant's fat
5. Gravimetrical analysis in power plants

Technical Data

Grade	Basis weight in g/m ²	Filtration velocity in s/10 ml	Wet burst strength in KN/m
Ashless hardened			
100	85	10	> 0.30
101	85	20	> 0.30
102	85	100	> 0.30
103	85	180	> 0.30
105	100	250	> 0.20



Grade	Retention in μm	Herzberg s/100ml
Ashless hardened		
100	12-15	40
101	8-12	90
102	3-5	800
103	2-3	1200
105	1-2	2500



			Part Numbers
Size in mm	Grade		Packaging
	100	101	
Circles			
47	C-100-047-N	C-101-047-N	100
50	C-100-050-N	C-101-050-N	100
55	C-100-055-N	C-101-055-N	100
70	C-100-070-N	C-101-070-N	100
90	C-100-090-N	C-101-090-N	100
110	C-100-110-N	C-101-110-N	100
125	C-100-125-N	C-101-125-N	100
150	C-100-150-N	C-101-150-N	100
185	C-100-185-N	C-101-185-N	100
240	C-100-240-N	C-101-240-N	100
320	C-100-320-N	C-101-320-N	100
Folded			
110	F-100-110-N	F-101-110-N	100
125	F-100-125-N	F-101-125-N	100
150	F-100-150-N	F-101-150-N	100
185	F-100-185-N	F-101-185-N	100
240	F-100-240-N	F-101-240-N	100
270	F-100-270-N	F-101-270-N	100
320	F-100-320-N	F-101-320-N	100
Sheets			
460x570	S-100-4657-N	S-101-4657-N	100
580x580	S-100-5858-N	S-101-5858-N	100

Size in mm	Grade		Packaging
	102	103	
Circles			
47	C-102-047-N	C-103-047-N	100
50	C-102-050-N	C-103-050-N	100
55	C-102-055-N	C-103-055-N	100
70	C-102-070-N	C-103-070-N	100
90	C-102-090-N	C-103-090-N	100
110	C-102-110-N	C-103-110-N	100
125	C-102-125-N	C-103-125-N	100
150	C-102-150-N	C-103-150-N	100
185	C-102-185-N	C-103-185-N	100
240	C-102-240-N	C-103-240-N	100
320	C-102-320-N	C-103-320-N	100



Laboratory Filter Papers

Part Numbers			
Size in mm	Grade		Packaging
	102	103	
Folded			
110	F-102-110-N	F-103-110-N	100
125	F-102-125-N	F-103-125-N	100
150	F-102-150-N	F-103-150-N	100
185	F-102-185-N	F-103-185-N	100
240	F-102-240-N	F-103-240-N	100
270	F-102-270-N	F-103-270-N	100
320	F-102-320-N	F-103-320-N	100
Sheets			
460x570	S-102-4657-N	S-103-4657-N	100
580x580	S-102-5858-N	S-103-5858-N	100

Size in mm	Grade	Packaging
	105	
Circles		
47	C-105-047-N	100
50	C-105-050-N	100
55	C-105-055-N	100
70	C-105-070-N	100
90	C-105-090-N	100
110	C-105-110-N	100
125	C-105-125-N	100
150	C-105-150-N	100
185	C-105-185-N	100
240	C-105-240-N	100
320	C-105-320-N	100
Folded		
110	F-105-110-N	100
125	F-105-125-N	100
150	F-105-150-N	100
185	F-105-185-N	100
240	F-105-240-N	100
270	F-105-270-N	100
320	F-105-320-N	100
Sheets		
460x570	S-105-4657-N	100
580x580	S-105-5858-N	100

Qualitative Filter Papers

Qualitative filter papers are used in applications where you want to find out what type of substances are included in the specimen to be tested irrespective of their quantity. Even without acid treatment, qualitative papers are still very pure as they are also made of cotton linters and a high amount of α -cellulose. Their ash content is lower than 0.1%.

The K&R Filter range of qualitative filter papers covers all requirements for qualitative analysis no matter what the filtration task may be. They can be supplied as sheets, discs or folded filters.

Features of Qualitative Filter Papers

1. Made of refined pulp and linters with a > 95% α -cellulose content
2. Ash content $\leq 0.1\%$ according to DIN 54370
3. Wet-strengthened
4. Supplied in rolls, sheets, discs and folded filters

Applications for Qualitative Filter Papers

1. Must analysis
2. Clean-up of biological fluids and organic extracts
3. Soil testing
4. Air pollution monitoring
5. Separation of solid foodstuff from associated liquids

Technical Data

Grade	Basis weight in g/m ²	Filtration velocity in s/10 ml	Burst strength in kPa
Non-Hardened High-Purity			
200	73	88	> 30
201	87	50	> 30

Grade	Retention in μm	Herzberg s/100ml
Non-Hardened High-Purity		
200	5-13	250
201	8-12	400



Technical Data

Grade	Basis weight in g/m ²	Filtration velocity in s/10 ml	Burst strength in kPa
Hardened High-Purity			
203	80	10	> 20
204	88	20	> 20
205	87	50	> 30
206	80	100	> 20
207	80	200	> 20

Grade	Retention in μm	Herzberg s/100ml
Hardened High-Purity		
203	15-20	40
204	12-15	90
205	8-12	800
206	4-7	1200
207	2-4	300





Laboratory Filter Papers

Part Numbers			
Size in mm	Grade		Packaging
	200	201	
	Non-Hardened High-Purity		
Circles			
45	C-200-045-N	C-201-045-N	100
47	C-200-047-N	C-201-047-N	100
50	C-200-050-N	C-201-050-N	100
55	C-200-055-N	C-201-055-N	100
70	C-200-070-N	C-201-070-N	100
90	C-200-090-N	C-201-090-N	100
110	C-200-110-N	C-201-110-N	100
125	C-200-125-N	C-201-125-N	100
150	C-200-150-N	C-201-150-N	100
185	C-200-185-N	C-201-185-N	100
240	C-200-240-N	C-201-240-N	100
320	C-200-320-N	C-201-320-N	100
Folded			
90	F-200-090-N	F-201-090-N	100
110	F-200-110-N	F-201-110-N	100
125	F-200-125-N	F-201-125-N	100
150	F-200-150-N	F-201-150-N	100
185	F-200-185-N	F-201-185-N	100
240	F-200-240-N	F-201-240-N	100
270	F-200-270-N	F-201-270-N	100
320	F-200-320-N	F-201-320-N	100
500	F-200-500-N	F-201-500-N	100
Sheets			
460x570	S-200-4657-N	S-201-4657-N	100
580x580	S-200-5858-N	S-201-5858-N	100

Size in mm	Grade		Packaging
	203	204	
	Hardened High-Purity		
Circles			
45	C-203-045-N	C-204-045-N	100
47	C-203-047-N	C-204-047-N	100
50	C-203-050-N	C-204-050-N	100
55	C-203-055-N	C-204-055-N	100
70	C-203-070-N	C-204-070-N	100
90	C-203-090-N	C-204-090-N	100
110	C-203-110-N	C-204-110-N	100
125	C-203-125-N	C-204-125-N	100
150	C-203-150-N	C-204-150-N	100
185	C-203-185-N	C-204-185-N	100
240	C-203-240-N	C-204-240-N	100



			Part Numbers
Size in mm	Grade		Packaging
	203	204	
	Hardened High-Purity		
Circles			
320	C-203-320-N	C-204-320-N	100
Folded			
90	F-203-090-N	F-204-090-N	100
110	F-203-110-N	F-204-110-N	100
125	F-203-125-N	F-204-125-N	100
150	F-203-150-N	F-204-150-N	100
185	F-203-185-N	F-204-185-N	100
240	F-203-240-N	F-204-240-N	100
270	F-203-270-N	F-204-270-N	100
320	F-203-320-N	F-204-320-N	100
500	F-203-500-N	F-204-500-N	100
Sheets			
460x570	S-203-4657-N	S-204-4657-N	100
580x580	S-203-5858-N	S-204-5858-N	100

Size in mm	Grade		Packaging
	205	206	
	Hardened High-Purity		
Circles			
45	C-205-045-N	C-206-045-N	100
47	C-205-047-N	C-206-047-N	100
50	C-205-050-N	C-206-050-N	100
55	C-205-055-N	C-206-055-N	100
70	C-205-070-N	C-206-070-N	100
90	C-205-090-N	C-206-090-N	100
110	C-205-110-N	C-206-110-N	100
125	C-205-125-N	C-206-125-N	100
150	C-205-150-N	C-206-150-N	100
185	C-205-185-N	C-206-185-N	100
240	C-205-240-N	C-206-240-N	100
320	C-205-320-N	C-206-320-N	100
Folded			
90	F-205-090-N	F-206-090-N	100
110	F-205-110-N	F-206-110-N	100
125	F-205-125-N	F-206-125-N	100
150	F-205-150-N	F-206-150-N	100
185	F-205-185-N	F-206-185-N	100
240	F-205-240-N	F-206-240-N	100
270	F-205-270-N	F-206-270-N	100
320	F-205-320-N	F-206-320-N	100
500	F-205-500-N	F-206-500-N	100



Laboratory Filter Papers

Part Numbers

Size in mm	Grade		Packaging
	205	206	
	Hardened High-Purity		
Sheets			
460x570	S-205-4657-N	S-206-4657-N	100
580x580	S-205-5858-N	S-206-5858-N	100

Size in mm	Grade	Packaging
	207	
	Hardened High-Purity	
Circles		
45	C-207-045-N	100
47	C-207-047-N	100
50	C-207-050-N	100
55	C-207-055-N	100
70	C-207-070-N	100
90	C-207-090-N	100
110	C-207-110-N	100
125	C-207-125-N	100
150	C-207-150-N	100
185	C-207-185-N	100
240	C-207-240-N	100
320	C-207-320-N	100
Folded		
90	F-207-090-N	100
110	F-207-110-N	100
125	F-207-125-N	100
150	F-207-150-N	100
185	F-207-185-N	100
240	F-207-240-N	100
270	F-207-270-N	100
320	F-207-320-N	100
500	F-207-500-N	100
Sheets		
460x570	S-207-4657-N	100
580x580	S-207-5858-N	100



General Purpose Filter Papers

Filter papers that are being used for no specific analytical task are often referred to as general purpose filter papers. They are mainly used for the clarification of solutions and for the filtration of hot and cold suspensions. The α -cellulose content of these filter papers is still quite high and the ash content is usually $< 0.5\%$. The general purpose filter papers offered by K&R Filter cover a range from slow to medium fast filtration. They are available in different basis weights and degrees of filtration fineness.

Features of General Purpose Papers

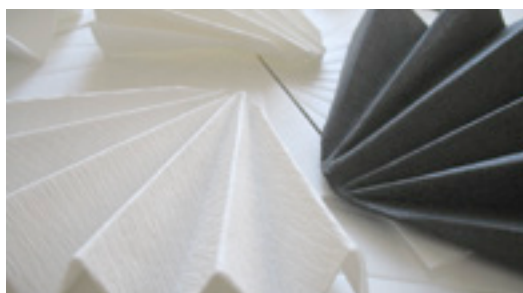
1. These are filter papers made from pulp with a high α -cellulose content and an average ash content of 0.5%
2. They are used for typical general filtration tasks in laboratories
3. Supplied in rolls, sheets, discs and folded filters

Applications for General Purpose Papers

1. Clarification of various solutions
2. Degassing of carbonated liquids (breweries)
3. Determination of sucrose in cane sugar (sugar industry)
4. Seed germination testing

Technical Data

Grade	Basis weight in g/m ²	Thickness in μm	Wet burst strength in KN/m
208	86	420	> 0.50
210	60	125	> 0.60
213	60	125	> 0.60
214	78	150	> 0.60
215	80	156	> 0.60
Grade	Retention in $\mu\text{m N}$	Air resistance in mm wc	Herzberg s/100 ml
208	15-20	150	120
210	8-12	225	80
213	8-12	225	70
214	8-12	295	100
215	8-12	265	70
Grade	Max. pore pressure in mm wc	Burst strength in kPa	Average ash content in %
208	200	> 130	< 1
210	225	> 80	< 1
213	175	> 80	< 1
214	285	> 80	< 1
215	245	> 85	< 1





Laboratory Filter Papers

Part Numbers		
Size in mm	Grade	Packaging
	208	
Circles		
55	C-208-055-N	100
70	C-208-070-N	100
90	C-208-090-N	100
110	C-208-110-N	100
125	C-208-125-N	100
150	C-208-150-N	100
185	C-208-185-N	100
240	C-208-240-N	100
270	C-208-270-N	100
320	C-208-320-N	100
385	C-208-385-N	100
450	C-208-450-N	100
500	C-208-500-N	100
Folded		
90	F-208-090-N	100
110	F-208-110-N	100
125	F-208-125-N	100
150	F-208-150-N	100
185	F-208-185-N	100
240	F-208-240-N	100
270	F-208-270-N	100
320	F-208-320-N	100
385	F-208-385-N	100
450	F-208-450-N	100
500	F-208-500-N	100
Sheets		
580x580	S-208-5858-N	100

Size in mm	Grade		Packaging
	210	213	
Circles			
55	C-210-055-N	C-213-055-N	100
70	C-210-070-N	C-213-070-N	100
90	C-210-090-N	C-213-090-N	100
110	C-210-110-N	C-213-110-N	100
125	C-210-125-N	C-213-125-N	100
150	C-210-150-N	C-213-150-N	100
185	C-210-185-N	C-213-185-N	100
240	C-210-240-N	C-213-240-N	100
270	C-210-270-N	C-213-270-N	100
320	C-210-320-N	C-213-320-N	100
385	C-210-385-N	C-213-385-N	100

			Part Numbers
Size in mm	Grade		Packaging
	210	213	
Circles			
450	C-210-450-N	C-213-450-N	100
500	C-210-500-N	C-213-500-N	100
Folded			
90	F-210-090-N	F-213-090-N	100
110	F-210-110-N	F-213-110-N	100
125	F-210-125-N	F-213-125-N	100
150	F-210-150-N	F-213-150-N	100
185	F-210-185-N	F-213-185-N	100
240	F-210-240-N	F-213-240-N	100
270	F-210-270-N	F-213-270-N	100
320	F-210-320-N	F-213-320-N	100
385	F-210-385-N	F-213-385-N	100
450	F-210-450-N	F-213-450-N	100
500	F-210-500-N	F-213-500-N	100
Sheets			
580x580	S-210-5858-N	S-213-5858-N	100

Size in mm	Grade		Packaging
	214	215	
Circles			
55	C-214-055-N	C-215-055-N	100
70	C-214-070-N	C-215-070-N	100
90	C-214-090-N	C-215-090-N	100
110	C-214-110-N	C-215-110-N	100
125	C-214-125-N	C-215-125-N	100
150	C-214-150-N	C-215-150-N	100
185	C-214-185-N	C-215-185-N	100
240	C-214-240-N	C-215-240-N	100
270	C-214-270-N	C-215-270-N	100
320	C-214-320-N	C-215-320-N	100
385	C-214-385-N	C-215-385-N	100
450	C-214-450-N	C-215-450-N	100
500	C-214-500-N	C-215-500-N	100
Folded			
90	F-214-090-N	F-215-090-N	100
110	F-214-110-N	F-215-110-N	100
125	F-214-125-N	F-215-125-N	100
150	F-214-150-N	F-215-150-N	100
185	F-214-185-N	F-215-185-N	100
240	F-214-240-N	F-215-240-N	100
270	F-214-270-N	F-215-270-N	100
320	F-214-320-N	F-215-320-N	100



Laboratory Filter Papers

Part Numbers			
Size in mm	Grade		Packaging
	214	215	
Folded			
385	F-214-385-N	F-215-385-N	100
450	F-214-450-N	F-215-450-N	100
500	F-214-500-N	F-215-500-N	100
Sheets			
580x580	S-214-5858-N	S-215-5858-N	100

Filter Paper for Special Applications -

Soil Analysis

K&R Filter offers a range of qualitative and quantitative filter papers which are used for the analysis of soil specimen. In modern agriculture, it is essential to have an exact knowledge of the nutrient and contaminant content of the soil that is used for farming. The analysis result helps to define the fertilizer composition needed before planting.

In general, soil is analyzed for its pH and for its content of available nitrogen (N), phosphorus (P), potassium (K), magnesium (Mg), and trace elements. Sometimes soil toxicity has to be assessed as soil may have been contaminated by use of pesticides or through disposal of waste material.

Technical Data			
Grade	Basis weight in g/m ²	Filtration velocity in s/10 ml	Burst strength in kPA
Non-Hardened High-Purity - qualitative			
200	73	88	> 30
201	87	50	> 30

Grade	Retention in µm	Herzberg s/100ml
Non-Hardened High-Purity - qualitative		
200	5-13	250
201	8-12	400

Technical Data			
Grade	Basis weight in g/m ²	Filtration velocity in s/10 ml	Wet burst strength in KN/m
Ashless hardened - quantitative, low magnesium content			
103MG	85	180	> 0.30

Grade	Retention in µm	Herzberg s/100ml
Ashless hardened - quantitative, low magnesium content		
103MG	2-3	1200

Part Numbers			
	103MG	200	201
Circles		C-200-150-N	C-201-150-N
Folded	F-103MG-110-N		
	F-103MG-125-N		
	F-103MG-150-N	F-200-150-N	F-201-150-N
		F-200-185-N	F-201-185-N
		F-200-240-N	F-201-240-N

Filter Paper for Special Applications -

Breweries

One of the particularly interesting applications of filter papers is in quality control laboratories of breweries. Beer brewers have to follow very strict instructions and need a lot of different filter papers to make sure their product is in compliance with the existing laws and regulations.

Some of the applications include elimination of CO₂ prior to beer analysis, removal of turbidities and malt analysis. K&R Filter offers the whole range of filtration products needed in a brewery QC lab, from qualitative filter papers to membrane filters used for microbiological analysis.

Technical Data and Application			
Grade	Basis weight in g/m ²	Retention in µm	Application / Characteristics
203	80	15-20	Suitable for extract (EBC method), qualitative hardened, medium fast filtration, medium open fibre matrix, plain
204	88	12-15	Qualitative hardened, open fibre matrix, fast filtration, plain
210	60	8-12	Suitable for final attenuation of congress wort, qualitative, plain
214	78	8-12	Recommended for malt analysis, qualitative, medium fast filtration, plain
215	80	8-12	Recommended for ASBC manual for Malt-4 analysis and degassing, qualitative, fast filtration, plain

				Part Numbers
Size in mm	Grade			Packaging
	203	204	210	
Folded				
240	F-203-240-N	F-204-240-N	F-210-240-N	100
320	F-203-320-N	F-204-320-N	F-210-320-N	100

Size in mm	Grade		Packaging
	214	215	
Folded			
240	F-214-240-N	F-215-240-N	100
320	F-214-320-N	F-215-320-N	100



Laboratory Filter Papers



Filter Paper for Special Applications -

Sugar Industry

Creped and smooth filter papers are being used in sugar laboratories all around the world for the clarification of dried sugar beet pulp extract and beet juice for the polarimetric determination of the sugar content.

The filter papers supplied by K&R Filter combine a high filtration speed with excellent retention characteristics and they are available as discs, sheets, folded filters and/or rolls.

Technical Data

Grade	Basis weight in g/m ²	Retention in µm	Characteristics
206	80	4-7	plain
208	86	15-20	creped, low sodium, potassium, ammonium
301	75	10	embossed
345	140	13	thick creped
346	65	25	thin creped
347	75	30	thin creped

Part Numbers

Size in mm	Grade			Packaging
	346	347	301	
Circles				
150	C-346-150-N	C-347-150-N		100
185	C-346-185-N	C-347-185-N		100
190		C-347-190-N		100
230		C-347-230-N		100
240	C-346-240-N			100
Folded				
240			F-301-240-N	100

Size in mm	Grade			Packaging
	208	345	206	
Circles				
150	C-208-150-N		C-206-150-N	100
185	C-208-185-N		C-206-185-N	100
190				
230				
240	C-208-240-N		C-206-240-N	100
Folded				
240		F-345-240-N		100

Filter Paper for Special Applications -

Seed Testing

Seed testing papers are widely used in germination testing of seed specimen and to improve seed growth and/or growth velocity. Owing to their extremely high purity, our seed testing papers provide reliable and reproducible results. The papers are made from pure cellulose without any additives and do not contain any substances which could influence the growth of the seeds. The constant water absorption of the papers ensures continuous water provision.

K&R Filter offers seed testing papers for all three ISTA methods:

TP – top of paper, BP – between papers and PP – pleated papers.





Laboratory Filter Papers

Seed Testing and Germination Paper Guide

Pleated Paper

Grade	Description/Type of seeds	Basis weight	Dimension
218	qual.-tech., plain pleated strips, 50 double pleats, white colour, for pelleted, medium and large seeds	120 g/m ²	2000x110
219	qual.-tech., plain pleated strips, 50 double pleats, gray colour, for seeds with fine roots	120 g/m ²	2000x110

Plain Paper

215	qual.-tech., plain sheets, low-ash (average 0.1%), high α -cellulose content, for all types of seed	80 g/m ²	110x580
215	qual.-tech., plain sheets, low-ash (average 0.1%), high α -cellulose content, for all types of seed	80 g/m ²	200x600
200	100 % α -cellulose content, pure cotton linters, fine crystalline, circles, for small specimens in petri dishes or Jacobsen Tanks with grass or flowers	87 g/m ²	90
214	qual.-tech., plain sheets, low-ash (average 0.1%), high α -cellulose content, for small specimens in petri dishes or Jacobsen Tanks with grass or flowers	75 g/m ²	30x160

Creped Paper

337	Technical paper, creped, circles, for small specimens in petri dishes or Jacobsen Tanks with grass or flowers	150 g/m ²	70
337	Technical paper, creped, sheets, for small specimens in petri dishes or Jacobsen Tanks with grass or flowers	150 g/m ²	580x580
338	Technical paper, creped, sheets, for cereals	180 g/m ²	150x700
338	Technical paper, creped, sheets, for cereals	180 g/m ²	580x580

Plain Boards

353	Technical board, plain, sheets, for small specimens in petri dishes or Jacobsen Tanks with grass or flowers	160 g/m ²	580x580
356	Technical board, plain, sheets, for cereals	300 g/m ²	200x600
357	Technical board, plain, sheets, for cereals	350 g/m ²	580x580

Seed Testing and Germination Paper Guide

Pleated Paper

Packing Unit	Part Numbers	Thickness in mm	Recommended Application
1000	S-218-20011-R	0.22	ISTA method PP (Pleated Paper) and AOSA method PP (Pleated Paper)
1000	S-219-20011-R	0.22	ISTA method PP (Pleated Paper) and AOSA method PP (Pleated Paper)

Plain Paper

500	S-215-1158-Q	0.18	/
500	S-215-2060-Q	0.18	/
100	C-200-090-N	0.31	ISTA method TP (Top of Paper) and AOSA methods P (Cover Petri Dishes) and TP (Top of Paper)
100	S-214-0316-N	0.15	/

Creped Paper

50	C-337-070-K	0.5	AOSA methods P (Cover Petri Dishes) and TC (Top of Creped Cellulose Paper Without Blotter)
100	S-337-5858-N	0.5	AOSA method P (Cover Petri Dishes) and AOSA method TC (Top of Creped Cellulose Paper without Blotter)
100	S-338-1570-N	0.65	ISTA methods TP (Top of Paper), BP (Between Papers) and AOSA methods T (Paper Toweling) and TC (Top of Creped Cellulose Paper Without Blotter)
100	S-338-5858-N	0,65	ISTA methods TP (Top of Paper), BP (Between Papers) and AOSA methods T (Paper Toweling) and TC (Top of Creped Cellulose Paper Without Blotter)

Plain Boards

100	S-353-5858-N	0.31	ISTA method TP (Top of Paper) and BP (Between Papers)
100	S-356-2060-N	0.52	ISTA methods TP (Top of Paper) and BP (Between Papers) and AOSA methods TP (Top of Papers) and B (Between Blotters)
100	S-357-5858-N	0.63	ISTA methods TP (Top of Paper) and BP (Between Papers) and AOSA methods TP (Top of Papers) and B (Between Blotters)



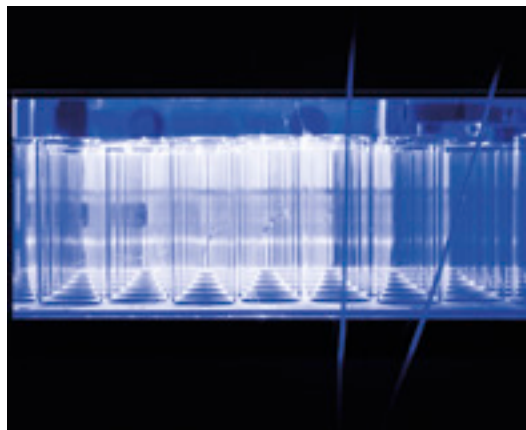
Laboratory Filter Papers

Chromatography Papers

K&R Filter supplies chromatography and blotting papers that are made of 100% cotton linters. Blotting papers are widely used in molecular biology for the transfer of proteins, DNA and RNA onto a membrane. In the field of protein biochemistry, blotting is done to determine the presence of certain types of proteins. In medicine, the process of blotting is used to detect the presence of disease-related proteins or viruses (e.g. BSE or HIV).

Characteristics - chromatography papers

1. Made of pure cotton linters with a 100 % α -cell. content
2. Very high resolution and very high wet-strength
3. Fibres predominantly in one direction
4. Thicker papers allow separation of higher quantities
5. Lower capillary rise more suitable for higher resolution



Technical Data

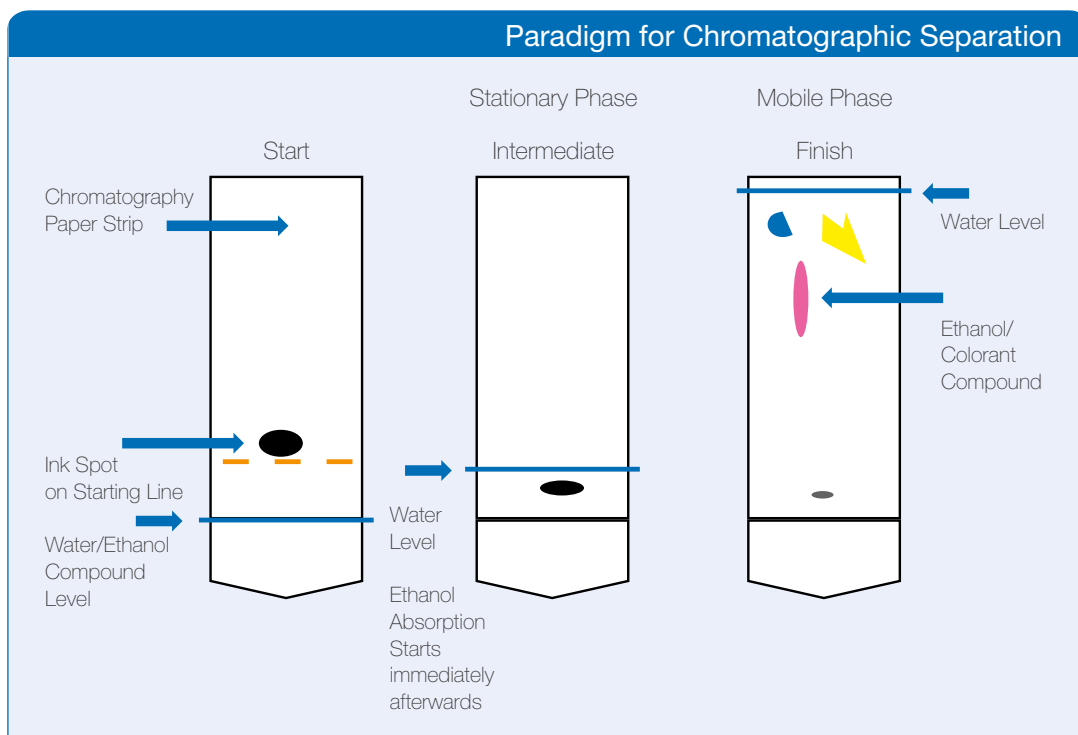
Analytical		
Grade	Characteristics	Basis weight in g/m ²
117	fast	120
110	medium fast	90
111	medium fast	120
115	medium fast	192
Grade	Thickness in mm	Capillary rise in mm
117	0.26	175
110	0.17	105
111	0.22	105
115	0.35	65

Preparative		
Grade	Characteristics	Basis weight in g/m ²
112	medium fast	165
114	very fast	320
118	very fast	700
Grade	Thickness in mm	Capillary rise in mm
112	0.34	115
114	0.9	155
118	1.3	170

Part Numbers

Analytical			
Size in mm	Grade	Part Numbers	Packaging
460x570	117	S-117-4657-N	100
580x600	117	S-117-5860-N	100

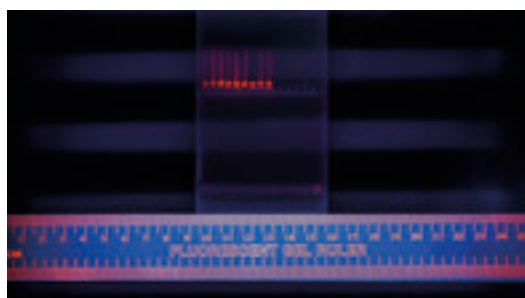
Part Numbers			
Analytical			
Size in mm	Grade	Part Numbers	Packaging
460x570	110	S-110-4657-N	100
580x600	110	S-110-5860-N	100
460x570	111	S-111-4657-N	100
580x600	111	S-111-5860-N	100
Preparative			
Size in mm	Grade	Part Numbers	Packaging
580x600	112	S-112-5860-N	100
580x600	114	S-114-5860-K	50
460x570	115	S-115-4657-G	25
580x600	115	S-115-5860-N	100
580x600	118	S-118-5860-N	100



Blotting Papers

Characteristics - blotting paper

1. Made of absolutely pure raw materials, without any additive. Therefore no contamination danger during transfer steps.
2. The analytical method is similar to chromatography papers, to ensure high and consistent capillary force and an equable transfer.
3. High wet-strength for better handling





Technical Data

	Grade		
	106	107	108
Surface	smooth	smooth	smooth
Characteristics	medium absorption	medium absorption	high absorption
Basis weight in g/m ²	192	320	570
Thickness in mm	0.35	0.90	1.50

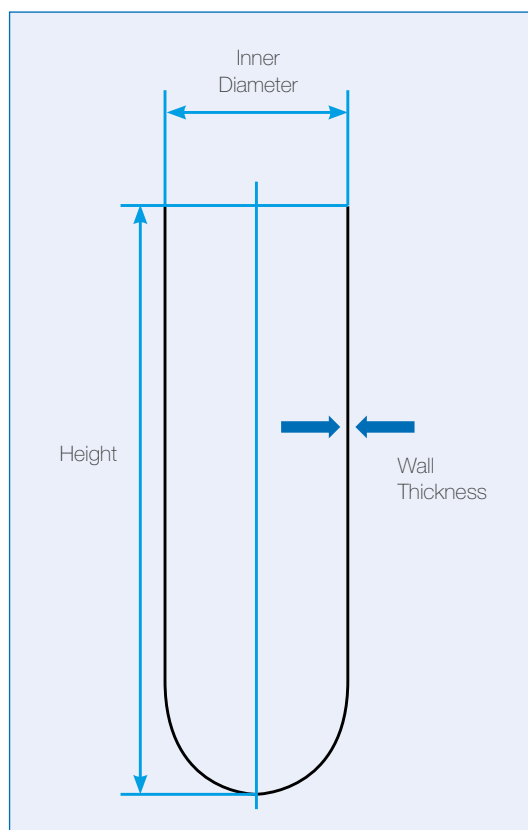
Part Numbers

Grade	Size in mm	Part Numbers	Packaging
106	460x570	S-106-4657-N	100
106	580x600	S-106-5860-N	100
107	580x600	S-107-5860-K	50
108	580x600	S-108-5860-G	25

Cellulose Extraction Thimbles for Soxhlet Extraction

Cellulose extraction thimbles are widely used in Soxhlet extraction. This is a technique for the analysis of fats and pesticides in food and soil specimen.

Our high-performance cellulose extraction thimbles are produced from high-quality α -cellulose cotton linters and have excellent mechanical strength and retention properties. K&R Filter offers extraction thimbles for all automated extraction equipment currently available on the market.



Applications

- Fat extraction (food industry)
- Lipid extraction (pharma industry)
- Analysis of toxic substances in toys
- Extraction of polycyclic aromatic hydrocarbons
- Determination of pesticides in food and soil samples
- Analysis of lacquer and binder in paints
- Vitamine A and carotene extraction
- Quality management of components used in pharmaceutical formulations

Tolerances according to DIN 12449

Internal diameter	+0/-3 mm
Thimble height	± 10 mm
Wall thickness	1.5 +/- 0.5 mm
Ash content in %	< 0.1
Max. temperature	120°C

Cellulose Extraction Thimbles Grade 220

Size in mm	Part Numbers	Packaging	Size in mm	Part Numbers	Packaging
22x80	TC-220-2280-G	25	28x100	TC-220-28100-G	25
22x100	TC-220-22100-G	25	30x80	TC-220-3080-G	25
25x60	TC-220-2560-G	25	30x100	TC-220-30100-G	25
25x80	TC-220-2580-G	25	33x80	TC-220-3380-G	25
25x100	TC-220-25100-G	25	33x34	TC-220-3334-G	25
26x60	TC-220-2660-G	25	33x100	TC-220-33100-G	25
26x80	TC-220-2680-G	25	43x123	TC-220-43123-G	25
28x22	TC-220-2822-G	25	43x125	TC-220-43125-G	25

pH Indicator Papers

pH indicator papers are products used to determine the acidity or alkalinity levels of solutions. The pH paper is a strip of paper that contains one or more different chemical compounds that undergo color change depending on the acidity of the solution tested. Our pH papers are accompanied by color charts, which guide you on how to match a color with a pH value.

The indicator papers sold by K&R Filter are available in the form of rolls and test strips in various measuring zones and pH intervals.



Applications

1. Measurements in coloured solutions
2. Special test solutions
3. Multiple indicators for highest exactness
4. Economically priced post purchasing solution
5. Easy measurement of acids and bases
6. Quick measurements even at home
7. Variety of applications and packaging

Characteristics

1. Wide range of pH indicator papers for the entire pH area in graduation of 0.2 pH and 0.3 pH
2. Fast and exact measuring of coloured, murky and clear aqueous solutions
3. Very high display accuracy of our pH test paper like LYPHAN rolls, due to indicator areas laying side by side
4. Explicit assigning under all kinds of light
5. Long resistance of our pH indicator papers, when stored in dry and dark place

Grade	Characteristics
500	LYPHAN pH strips (200 p./pack), pH interval 0.2
501	LYPHAN pH strips (200 p./pack), pH interval 0.3
502	LYPHAN pH strips (200 p./pack), pH interval 1.0/0.5
503	LYPHAN pH strips (200 p./pack), extended pH interval 0.3
504	LYPHAN pH strips (200 p./pack), special paper slight buffering
505	LYPHAN pH strips (200 p./pack), special paper breweries and other fermenting products
506	LYPHAN pH rolls (1 roll 6m/pack) in rotary plastic boxes
507	LYPHAN refill packs (2 rolls) for grade 506
508	LYPHAN pH rolls (1 roll 6m/pack) in rotary plastic boxes
509	LYPHAN refill packs (2 rolls) for grade 508
510	LYPHAN special paper (booklet of 100 strips) - Litmus blue
511	LYPHAN special paper (booklet of 100 strips) - Litmus red
512	LYPHAN special paper (booklet of 100 strips) - Kongo paper
513	LYPHAN special paper (booklet of 100 strips) - Phenolphthalein paper



Laboratory Filter Papers

Part Numbers

Grade	Part Number	pH range
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Strips

500	S-500-3953-S	3.9-5.3
	S-500-3044-S	3.0-4.4
	S-500-1832-S	1.8-3.2
	S-500-5266-S	5.2-6.6
	S-500-6074-S	6.0-7.4
	S-500-6680-S	6.6-8.0
	S-500-5670-S	5.6-7.0
	S-500-6680-S	6.6-8.0
	S-500-7387-S	7.3-8.7
	S-500-8610-S	8.6-10
501	S-501-0414-S	0.4-1.4
	S-501-1028-S	1.0-2.8
	S-501-1637-S	1.6-3.7
	S-501-2641-S	2.6-4.1
	S-501-3954-S	3.9-5.4
	S-501-4361-S	4.3-6.1
	S-501-5267-S	5.2-6.7
	S-501-6075-S	6.0-7.5
	S-501-6681-S	6.6-8.1
	S-501-7587-S	7.5-8.7
	S-501-8297-S	8.2-9.7
	S-501-8810-S	8.8-10
	S-501-9410-S	9.4-10.3
	S-501-1011-S	10-11.3
502	S-502-9014-S	9.0-14
	S-502-1013-S	10.5-13
	S-502-1114-S	11.5-14
503	S-503-2647-S	2.6-4.7
	S-503-3960-S	3.9-6.0
	S-503-6081-S	6.0-8.1
	S-503-6687-S	6.6-8.7
	S-503-1113-S	11-13.1
504	S-504-3051-S	3.0-5.1
505	S-505-2443-S	2.4-4.3

Part Numbers

Grade	Part Number	pH range
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Rolls

506	R-506-0111-Z	1-11
	R-506-3969-Z	3.9-6.9
	R-506-4979-Z	4.9-7.9
	R-506-6999-Z	6.9-9.9
507	R-507-0111-T	1-11
	R-507-3969-T	3.9-6.9
	R-507-4979-T	4.9-7.9
	R-507-6999-T	6.9-9.9
508	R-508-0014-Z	0-14
509	R-509-0014-Z	0-14
510	S-510-LBB-N	Litmus Blue
511	S-511-LBR-N	Litmus Red
512	S-512-BKP-N	Kongo
513	S-513-BPH-N	Phenolphthalein



PE-Coated Paper for Surface Protection

Working surfaces such as laboratory tables very often become contaminated by spill of chemicals or other toxic or infectious materials.

K&R Filter offers a PE-coated filter paper that helps to keep working areas clean. The product consists of an absorbent top layer on cellulose basis that quickly absorbs all spills. The bottom layer consists of a polyethylene coating that prevents the liquid from penetrating the surface underneath. PE-coated filter paper is available in rolls and sheets in various standard sizes.

Technical Data			
Grade	Basis weight in g/m ²	Water absorption in %	Characteristics
317	151	145	High absorption capacity

Part Numbers			
Size	Grade	Part Numbers	Packaging
Reels			
400 mm x 50 m	317	R-317-4005-Z	1
400 mm x 100 m	317	R-317-4010-Z	1
460 mm x 100 m	317	R-317-4610-Z	1
500 mm x 50 m	317	R-317-5005-Z	1
500 mm x 100 m	317	R-317-5010-Z	1
600 mm x 50 m	317	R-317-6005-Z	1
Sheets			
460 mm x 570 mm	317	S-317-4657-K	50
480 mm x 600 mm	317	S-317-4860-K	50
480 mm x 600 mm	317	S-317-4860-N	100



Microfiltration



Microfiltration is a type of physical filtration process where a contaminated fluid is passed through a special pore-sized membrane to separate microorganisms and suspended particles from process liquid.

Microfiltration usually serves as a pre-treatment for other separation processes such as ultrafiltration, and a post-treatment for granular media filtration. The typical particle size used for microfiltration ranges from about 0.1 to 10 μm .

Membranes are available in form of different polymers, in various pore sizes and diameters depending upon the respective filtration task.

K&R Filter offers a complete line of microfiltration products for laboratory applications including membranes, syringe filters as well as bottle top systems.

Contents

page

29 Membrane Filters

40 Syringe Filters

55 Other Microfiltration Products

Membrane Filters

Membrane filters, also called screen filters, are surface filters which have pores of a certain size that allow only smaller particles to pass through.

Membranes, or membrane filters, can be validated for 100% retention of contaminants larger than their pore size. These filters are placed at the furthest possible point in a system to remove the last remaining traces of resin fragments, carbon fines, colloidal particles, microorganisms or other undesirable contaminants.

The K&R membrane filters product line includes a wide selection of membrane materials for the microfiltration with pore sizes from 0.1 μm to 8 μm . Typical applications for membrane filters are cell retention, particle collection, clarification and sterile filtration of aqueous solutions, particulate analysis, microbiological analysis and epifluorescence microscopy.

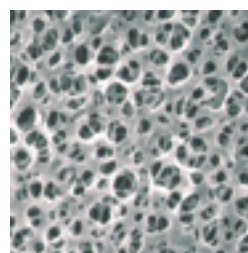
MCE Membrane Filters

Characteristics	Applications
1. Are composed of cellulose nitrate and cellulose acetate	1. Microbiology analysis
2. One of the most widely used membrane for analytical research applications	2. Clarification of aqueous solutions
3. High porosity	3. Fluorescent bacteriological assays
4. High purity	4. Microdialysis of DNA and proteins
5. Good thermal stability	



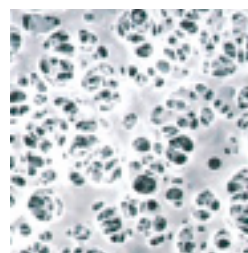
CA Membrane Filters

Characteristics	Applications
1. Made of pure cellulose acetate	1. Protein and enzyme filtration
2. Very low protein binding	2. Biological fluid sterilization
3. Ideal for protein and enzyme filtration	3. Diagnostic cytology
4. High strength and dimension stability	4. Receptor binding studies
5. Hydrophilic	5. Sterilization of tissue culture media
6. High throughput	



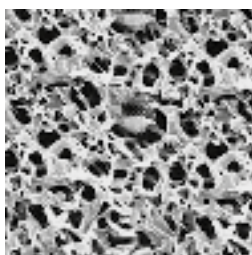
Regenerated Cellulose Membrane Filters

Characteristics	Applications
1. Made of RC, reinforced with cellulose scrim	1. Particle removal from solvents
2. Hydrophilic and easily wettable	2. Mobile phases filtration for HPLC
3. Resistant to almost all solvents in the pH range 3-12	
4. Low non-specific adsorption	



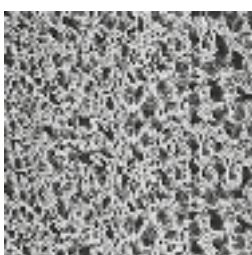


Microfiltration



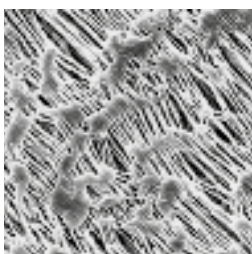
PVDF Membrane Filters

Characteristics	Applications
1. Particularly microporous membrane	1. Lining material for tubes and fittings
2. High efficiency in particle removal	2. Sterile filtration of biochemical solutions
3. Wide chemical compatibility	3. Insulation material on electrical wires
4. Approved for contact with food products	4. Membrane for immunoblotting
5. High temperature and ageing resistance	



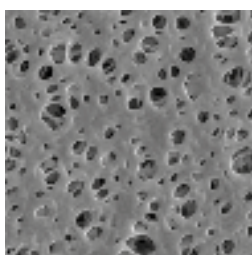
Nylon Membrane Filters

Characteristics	Applications
1. Hydrophilic	1. Bacterial and particulate removal
2. Low extractables	2. HPLC solvent and sample filtration
3. High surface area	3. Diagnostic kits
4. High protein binding capacity	4. Drug filtration
5. High strength and heat resistance	5. Biosensors
6. Compatible with aqueous and alcoholic solutions	6. Blood glucose



PTFE Membrane Filters

Characteristics	Applications
1. Microporous film, supported by a polyester layer	1. Filtration of aggressive solutions and strong acids
2. Effective filtration of micro-organisms	2. Venting applications
3. Wide chemical compatibility	3. Phase separations
4. High temperature resistance	4. Aerosol samplings



PES Membrane Filters

Characteristics	Applications
1. Highly asymmetrical pore structure	1. Water filtration
2. High dirt loading capacity	2. Special chemical reagent filtration
3. Hydrophilic	3. Filtration of high temperature liquids
4. Low protein capacity	
5. High flow rate	
6. High thermal stability	





Non-Sterile Membranes K&R Filter Brand

Nylon - Non-Gridded

Part No.	Dimension in mm	Pore size	Packaging
MF-721-02-13-M	13	0.22 µm	400
MF-721-02-25-S	25	0.22 µm	200
MF-721-02-47-S	47	0.22 µm	200
MF-721-02-90-N	90	0.22 µm	100
MF-721-02-142-K	142	0.22 µm	50
MF-721-02-293-G	293	0.22 µm	25
MF-720-05-13-M	13	0.45 µm	400
MF-720-05-25-S	25	0.45 µm	200
MF-720-05-47-S	47	0.45 µm	200
MF-720-05-90-N	90	0.45 µm	100
MF-720-05-142-K	142	0.45 µm	50
MF-720-05-293-G	293	0.45 µm	25
MF-779-08-13-M	13	0.8 µm	400
MF-779-08-25-S	25	0.8 µm	200
MF-779-08-47-S	47	0.8 µm	200
MF-779-08-90-N	90	0.8 µm	100
MF-779-08-142-K	142	0.8 µm	50
MF-779-08-293-G	293	0.8 µm	25
MF-780-12-13-M	13	1.2 µm	400
MF-780-12-25-S	25	1.2 µm	200
MF-780-12-47-S	47	1.2 µm	200
MF-780-12-90-N	90	1.2 µm	100
MF-780-12-142-K	142	1.2 µm	50
MF-780-12-293-G	293	1.2 µm	25
MF-781-30-13-M	13	3.0 µm	400
MF-781-30-25-S	25	3.0 µm	200
MF-781-30-47-S	47	3.0 µm	200
MF-781-30-90-N	90	3.0 µm	100
MF-781-30-142-K	142	3.0 µm	50
MF-781-30-293-G	293	3.0 µm	25
MF-782-50-13-M	13	5.0 µm	400
MF-782-50-25-S	25	5.0 µm	200
MF-782-50-47-S	47	5.0 µm	200
MF-782-50-90-N	90	5.0 µm	100
MF-782-50-142-K	142	5.0 µm	50
MF-782-50-293-G	293	5.0 µm	25
Hydrophobic PTFE - Non-Gridded			
MF-719-02-13-M	13	0.22 µm	400
MF-719-02-25-S	25	0.22 µm	200
MF-719-02-47-S	47	0.22 µm	200
MF-719-02-90-N	90	0.22 µm	100
MF-719-02-142-K	142	0.22 µm	50
MF-718-05-13-M	13	0.45 µm	400



Microfiltration

Non-Sterile Membranes K&R Filter Brand

Hydrophobic PTFE - Non-Gridded			
Part No.	Dimension in mm	Pore size	Packaging
MF-718-05-25-S	25	0.45 µm	200
MF-718-05-47-S	47	0.45 µm	200
MF-718-05-90-N	90	0.45 µm	100
MF-718-05-142-K	142	0.45 µm	50
MF-778-01-25-S	25	0.1 µm	200
MF-778-01-47-S	47	0.1 µm	200
MF-778-01-90-N	90	0.1 µm	100
MF-778-01-142-K	142	0.1 µm	50
MF-717-12-25-S	25	1.2 µm	200
MF-717-12-47-S	47	1.2 µm	200
MF-717-12-90-N	90	1.2 µm	100
MF-717-12-142-K	142	1.2 µm	50
MF-777-30-25-S	25	3.0 µm	200
MF-777-30-47-S	47	3.0 µm	200
MF-777-30-90-N	90	3.0 µm	100
MF-777-30-142-K	142	3.0 µm	50
MF-716-50-25-S	25	3.0 µm	200
MF-716-50-47-S	47	5.0 µm	200
MF-716-50-90-N	90	5.0 µm	100
MF-716-50-142-K	142	5.0 µm	50
Hydrophilic PTFE - Non-Gridded			
MF-776-02-13-M	13	0.22 µm	400
MF-776-02-25-S	25	0.22 µm	200
MF-776-02-47-S	47	0.22 µm	200
MF-776-02-90-N	90	0.22 µm	100
MF-775-05-13-M	13	0.45 µm	400
MF-775-05-25-S	25	0.45 µm	200
MF-775-05-47-S	47	0.45 µm	200
MF-775-05-90-N	90	0.45 µm	100
Cellulose Acetate - Non-Gridded			
MF-705-02-13-M	13	0.22 µm	400
MF-705-02-25-S	25	0.22 µm	200
MF-705-02-47-S	47	0.22 µm	200
MF-705-02-90-N	90	0.22 µm	100
MF-705-02-142-K	142	0.22 µm	50
MF-704-05-13-M	13	0.45 µm	400
MF-704-05-25-S	25	0.45 µm	200
MF-704-05-47-S	47	0.45 µm	200
MF-704-05-90-N	90	0.45 µm	100
MF-704-05-142-K	142	0.45 µm	50
MF-702-08-13-M	13	0.8 µm	400
MF-702-08-25-S	25	0.8 µm	200
MF-702-08-47-S	47	0.8 µm	200

Non-Sterile Membranes K&R Filter Brand

CELLULOSE ACETATE - NON-GRIDDED

Part No.	Dimension in mm	Pore size	Packaging
MF-702-08-90-N	90	0.8 µm	100
MF-702-08-142-K	142	0.8 µm	50

Cellulose Nitrate - Non-Gridded

MF-774-02-47-S	47	0.22 µm	200
MF-774-05-47-S	47	0.45 µm	200
MF-774-08-47-S	47	0.8 µm	200

Mixed Cellulose Ester - Non-Gridded

MF-774-02-13-M	13	0.22 µm	400
MF-774-02-25-S	25	0.22 µm	200
MF-774-02-37-S	37	0.22 µm	200
MF-774-02-47-S	47	0.22 µm	200
MF-774-02-90-N	90	0.22 µm	100
MF-774-02-142-K	142	0.22 µm	50
MF-734-05-13-M	13	0.45 µm	400
MF-734-05-25-S	25	0.45 µm	200
MF-734-05-37-S	37	0.45 µm	200
MF-734-05-47-S	47	0.45 µm	200
MF-734-05-90-N	90	0.45 µm	100
MF-734-05-142-K	142	0.45 µm	50
MF-732-08-13-M	13	0.8 µm	400
MF-732-08-25-S	25	0.8 µm	200
MF-732-08-37-S	37	0.8 µm	200
MF-732-08-47-S	47	0.8 µm	200
MF-732-08-90-N	90	0.8 µm	100
MF-732-08-142-K	142	0.8 µm	50
MF-731-12-13-M	13	1.2 µm	400
MF-731-12-25-S	25	1.2 µm	200
MF-731-12-37-S	37	1.2 µm	200
MF-731-12-47-S	47	1.2 µm	200
MF-731-12-90-N	90	1.2 µm	100
MF-731-12-142-K	142	1.2 µm	50
MF-730-30-13-M	13	3.0 µm	400
MF-730-30-25-S	25	3.0 µm	200
MF-730-30-37-S	37	3.0 µm	200
MF-730-30-47-S	47	3.0 µm	200
MF-730-30-90-N	90	3.0 µm	100
MF-730-30-142-K	142	3.0 µm	50
Mixed Cellulose Ester - Gridded			
MF-739-02-47-S	47	0.22 µm	200
MF-738-05-47-S	47	0.45 µm	200
MF-737-08-47-S	47	0.8 µm	200
Mixed Cellulose Ester - Black - Gridded			
MF-742-02-47-S	47	0.22 µm	200



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Non-Sterile Membranes K&R Filter Brand

Mixed Cellulose Ester - Black - Gridded			
Part No.	Dimension in mm	Pore size	Packaging
MF-743-05-47-S	47	0.45 µm	200
MF-741-08-47-S	47	0,8 µm	200
PES - Gridded			
MF-725-02-13-M	13	0.22 µm	400
MF-725-02-25-S	25	0.22 µm	200
MF-725-02-47-S	47	0.22 µm	200
MF-725-02-90-N	90	0.22 µm	100
MF-725-02-142-K	142	0.22 µm	50
MF-724-05-13-M	13	0.45 µm	400
MF-724-05-25-S	25	0.45 µm	200
MF-724-05-47-S	47	0.45 µm	200
MF-724-05-90-N	90	0.45 µm	100
MF-724-05-142-K	142	0.45 µm	50
MF-726-01-13-M	13	0.1 µm	400
MF-726-01-25-S	25	0.1 µm	200
MF-726-01-47-S	47	0.1 µm	200
MF-726-01-90-N	90	0.1 µm	100
PVDF - Gridded			
MF-749-02-13-M	13	0.22 µm	400
MF-749-02-25-S	25	0.22 µm	200
MF-749-02-47-S	47	0.22 µm	200
MF-749-02-90-N	90	0.22 µm	100
MF-749-02-142-K	142	0.22 µm	50
MF-750-05-13-M	13	0.45 µm	400
MF-750-05-25-S	25	0.45 µm	200
MF-750-05-47-S	47	0.45 µm	200
MF-750-05-90-N	90	0.45 µm	100
MF-750-05-142-K	142	0.45 µm	50
PP - Gridded			
MF-773-02-25-S	25	0.22 µm	200
MF-773-02-47-S	47	0.22 µm	200
MF-773-02-90-N	90	0.22 µm	100
MF-773-02-142-K	142	0.22 µm	50
MF-773-02-250-K	250	0.22 µm	50
MF-773-02-293-G	293	0.22 µm	25
MF-772-05-25-S	25	0.45 µm	200
MF-772-05-47-S	47	0.45 µm	200
MF-772-05-90-N	90	0.45 µm	100
MF-772-05-142-K	142	0.45 µm	50
MF-772-05-250-K	250	0.45 µm	50
MF-772-05-293-G	293	0.45 µm	25

Sterile MCE Membranes K&R Filter Brand

Part No.	Description - Dimension	Pore size	Packaging
MF-755-02-47-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.22 µm, 47 mm	0.22 µm	100
MF-754-05-47-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.45 µm, 47 mm	0.45 µm	100
MF-752-08-47-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.8 µm, 47 mm	0.8 µm	100
MF-755-02-50-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.22 µm, 50 mm	0.22 µm	100
MF-754-05-50-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.45 µm, 50 mm	0.45 µm	100
MF-752-08-50-N	MCE Gridded Membrane Filter, White, Individually Packed, Sterile, 0.8 µm, 50 mm	0.8 µm	100
MF-755-02-47-NP	MCE Gridded Membrane Filter, Individually Packed, White, Sterile, 0.22 µm, 47 mm, With Pad	0.22 µm	100
MF-754-05-47-NP	MCE Gridded Membrane Filter, Individually Packed, White, Sterile, 0.45 µm, 47 mm, With Pad	0.45 µm	100
MF-752-08-47-NP	MCE Gridded Membrane Filter, Individually Packed, White, Sterile, 0.80 µm, 47 mm, With Pad	0.80 µm	100
MF-766-02-47-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.22 µm, 47 mm	0.22 µm	100
MF-759-05-47-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.45 µm, 47 mm	0.45 µm	100
MF-757-08-47-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.80 µm, 47 mm	0.8 µm	100
MF-766-02-50-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.22 µm, 50 mm	0.22 µm	100
MF-759-05-50-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.45µm, 50 mm	0.45 µm	100
MF-757-08-50-N	MCE Gridded Membrane Filter, Individually Packed, Black, Sterile, 0.80 µm, 50 mm	0.8 µm	100

Sterile MCE Membranes for Dispenser K&R Filter Brand

MF-769-02-47-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.22 µm, 47 mm, Suitable for Membrane Dispenser	0.22 µm	150
MF-768-05-47-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.45 µm, 47 mm, Suitable for Membrane Dispenser	0.45 µm	150
MF-767-08-47-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.8 µm, 47 mm, Suitable for Membrane Dispenser	0.8 µm	150
MF-769-02-50-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.22 µm, 50 mm, Suitable for Membrane Dispenser	0.22 µm	150
MF-768-05-50-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.45 µm, 50 mm, Suitable for Membrane Dispenser	0.45 µm	150



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Sterile MCE Membranes for Dispenser K&R Filter Brand

Part No.	Description - Dimension	Pore size	Packaging
MF-767-08-50-DP	MCE Gridded Membrane Filter, White, Continuous Package, Sterile, 0.8 µm, 50 mm, Suitable for Membrane Dispenser	0.8 µm	150
MF-771-05-47-DP	MCE Gridded Membrane Filter, Black, Continuous Package, Sterile, 0.45 µm, 47 mm, Suitable for Membrane Dispenser	0.45 µm	150
MF-770-08-47-DP	MCE Gridded Membrane Filter, Black, Continuous Package, Sterile, 0.8 µm, 47 mm, Suitable for Membrane Dispenser	0.8 µm	150
MF-771-05-50-DP	MCE Gridded Membrane Filter, Black, Continuous Package, Sterile, 0.45 µm, 50 mm, Suitable for Membrane Dispenser	0.45 µm	150
MF-770-08-50-DP	MCE Gridded Membrane Filter, Black, Continuous Package, Sterile, 0.8 µm, 50 mm, Suitable for Membrane Dispenser	0.8 µm	150



Part Numbers Membrane Filters Original GVS Brand

Dimension in mm	Pore size	Part Number	Packaging	Description
Cellulose Acetate				
47	0.22 µm	1213804	100	Plain
47	0.45 µm	1215676	100	Plain
47	0.8 µm	1212942	100	Plain
47	0.65 µm	1213358	100	Plain
47	1.2 µm	1213805	100	Plain
47	5.0 µm	1214411	100	Plain

Part Numbers Membrane Filters Original GVS Brand

Dimension in mm	Pore size	Part Number	Packaging	Description
Mixed Cellulose Ester				
47	0.1 µm	1214533	100	Plain
47	0.22 µm	1214839	100	Gridded
47	0.22 µm	1214396	1000 - indiv. packed, sterile	Gridded
47	0.22 µm	3014797	10000 - indiv. packed, sterile	Gridded
47	0.22 µm	1214861	200 - indiv. packed, sterile	Gridded
47	0.22 µm	1214909	100	Plain
47	0.45 µm	3033231	1000 - indiv. packed, sterile	Black
47	0.45 µm	3033232	10000 - indiv. packed, sterile	Black
47	0.45 µm	1214977	100	Black Gridded
47	0.45 µm	1213643	1000 - indiv. packed, sterile	Black Gridded
47	0.45 µm	1215004	10000 - indiv. packed, sterile	Black Gridded
47	0.45 µm	1214991	200 - indiv. packed, sterile	Black Gridded
47	0.45 µm	1215207	100	Gridded
47	0.45 µm	3013416	1000	Gridded
47	0.45 µm	1214923	1000 - indiv. packed, sterile	Gridded
47	0.45 µm	3007634	10000 - indiv. packed, sterile	Gridded
47	0.45 µm	1215230	200 - indiv. packed, sterile	Gridded
47	0.45 µm	1221946	5000 - indiv. packed, sterile	Gridded
47	0.45 µm	1215281	100	Plain
47	0.6 µm	1215380	100	Plain
47	0.65 µm	1213331	200 - indiv. packed, sterile	Black Gridded
47	0.65 µm	1215406	200 - indiv. packed, sterile	Gridded
47	0.8 µm	1215416	100	Black
47	0.8 µm	1215412	100	Black Gridded
47	0.8 µm	1215421	100	Gridded
47	0.8 µm	1215428	100	Plain
47	1.2 µm	1215437	100	Gridded
47	1.2 µm	1215441	100	Plain
47	5.0 µm	1215451	100	Plain
47	8.0 µm	3053377	100	Black Gridded
47	8.0 µm	1215456	100	Plain
Nylon				
47	0.1 µm	1213762	100	Plain
47	0.1 µm	3026917	1000 - indiv. packed, sterile	Plain
	0.22 µm	ME047N-NY002BC01		Plain
47	0.22 µm	1213769	100	Plain
47	0.45 µm	1213825	100	Gridded
47	0.45 µm	1213845	200 - indiv. packed, sterile	Gridded
47	0.45 µm	1213776	100	Plain
47	0.45 µm	1220671	1000 - indiv. packed, sterile	Plain
47	0.6 µm	1213783	100	Plain
47	0.8 µm	1213790	100	Plain



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Part Numbers Membrane Filters Original GVS Brand				
Dimension in mm	Pore size	Part Number	Packaging	Description
Nylon				
47	1.2 µm	1214880	100	Gridded
47	1.2 µm	1213797	100	Plain
47	5.0 µm	3048260	100	Gridded
47	5.0 µm	1213812	100	Plain
47	10 µm	1213819	100	Plain
47	20 µm	1213803	100	Plain
PES				
47	0.03 µm	3028505	100	Plain
47	0.1 µm	1214756	100	Plain
47	0.22 µm	1214465	100	Plain
47	0.45 µm	1214475	100	Plain
47	0.8 µm	1214568	100	Plain
47	1.2 µm	1221008	100	Plain
47	5.0 µm	1215396	100	Plain
Polycarbonate				
47	0.01 µm	1226494	100	Hydrophobic
47	0.01 µm	1215068	100	Plain
47	0.03 µm	1215069	100	Plain
47	0.05 µm	1215070	100	Plain
47	0.08 µm	1222093	100	Plain
47	0.1 µm	1221503	100	Black
47	0.1 µm	1215608	100	Plain
47	0.15 µm	3050002	100	Plain
47	0.22 µm	1213889	100	Black
47	0.22 µm	1222018	100	Hydrophobic
47	0.22 µm	1215612	100	Plain
47	0.45 µm	1215071	100	AOX
47	0.45 µm	1214567	100	Black
47	0.45 µm	1215073	100	Hydrophobic
47	0.45 µm	1215617	100	Plain
47	0.45 µm	1226156	200 - indiv. packed, sterile	Plain
47	0.6 µm	1215198	100	Black
47	0.6 µm	1215620	100	Plain
47	0.8 µm	1222028	100	Black
47	0.8 µm	1215624	100	Plain
47	1.0 µm	1222035	100	Black
47	1.0 µm	1222038	100	Hydrophobic
47	1.0 µm	1215628	100	Plain
47	1.2 µm	3027598	100	Plain
47	2.0 µm	1215629	100	Plain
47	3.0 µm	3032159	100	Black
47	3.0 µm	1222077	100	Hydrophobic
47	3.0 µm	1215036	100	Plain

Part Numbers Membrane Filters Original GVS Brand

Dimension in mm	Pore size	Part Number	Packaging	Description
Polycarbonate				
47	5.0 µm	1221230	100	Black
47	5.0 µm	1222081	100	Hydrophobic
47	5.0 µm	1215632	100	Plain
47	5.0 µm	3015061	100	Plain
47	8.0 µm	1215148	100	Hydrophobic
47	8.0 µm	1215637	100	Plain
47	10 µm	1220941	100	Hydrophobic
47	10 µm	1212661	100	Plain
47	14 µm	1222066	100	Hydrophobic
47	14 µm	3054145	100	Hydrophobic
47	14 µm	1215077	100	Plain
47	20 µm	3013415	100	Hydrophobic
47	20 µm	1215078	100	Plain
Polyester				
47	0.22 µm	1215288	100	Plain
47	0.45 µm	1215373	100	Plain
47	0.8 µm	1215374	100	Plain
47	1.0 µm	1220871	100	Plain
47	2.0 µm	1221405	100	Plain
47	3.0 µm	1215367	100	Plain
47	5.0 µm	1215183	100	Plain
47	8.0 µm	1221419	100	Plain
47	10 µm	1215173	100	Plain
Polypropylene Absolute				
47	0.1 µm	1214237	100	Plain
47	0.22 µm	1214239	100	Plain
47	0.45 µm	1214235	100	Plain
Polypropylene MB				
47	0.22 µm	1213180	100	Plain
47	0.45 µm	1212380	100	Plain
47	1.2 µm	1212391	100	Plain
47	10 µm	1225792	100	Plain
PTFE-Teflon				
47	0.22 µm	1215487	100	PP laminated
47	0.45 µm	1215493	100	PP laminated
47	1.0 µm	1215504	100	PP laminated
Regenerated Cellulose				
47	0.22 µm	ME047N-RC002BC01	100	Plain
47	0.45 µm	ME047N-RC004BC01	100	Plain
Polyethylene				
47	0.22 µm	ME047N-PE002BC01	100	Plain



Part Numbers Membrane Filters Original GVS Brand				
Dimension in mm	Pore size	Part Number	Packaging	Description
Polyethylene				
47	0.45 µm	ME047N- PE005BC01	100	Plain
PVDF				
47	0.22 µm	3044270	100	Plain
47	0.22 µm	ME047N- PV002BC01	100	Plain
47	0.45 µm	3037800	100	Plain
47	0.45 µm	ME047N- PV004BC01	100	Plain

Syringe Filters

A syringe filter is a single-use filter cartridge. It is attached to the end of a syringe for use. It generally consists of a plastic housing with a membrane which serves as a filter. The fluid to be purified may be cleaned by drawing it up the syringe through the filter, or by forcing the unfiltered fluid out, through the filter.

Syringe filters may be used to remove particles from a sample, prior to analysis by HPLC. They are also available for the filtration of gases, and for the removal of bacteria from a sample.

K&R Filter offers a wide range of syringe filters with different filtration media and pore sizes ranging from 0.1 µm to 8 µm. Our customers have the possibility of choice between the GVS product line that we carry and our own K&R Filter product line for syringe filter products.



Syringe Filters K&R Filter Brand

Grade	Description	Size in mm	Part Numbers	Packaging
800	PES High flow/MBS housing, luer lock outlet, sterile, 0.1 µm, syringe filter	28	SF-800-01-28-LL-N	100
801	PES High flow/MBS housing, luer lock outlet, sterile, 0.2 µm, syringe filter	28	SF-801-02-28-LL-N	100
801	PES High flow/MBS housing, luer slip outlet, sterile, 0.2 µm, syringe filter	28	SF-801-02-28-LS-N	100
801	PES High Flow/MBS housing, luer lock outlet, sterile, 0.45 µm, syringe filter	28	SF-801-05-28-LL-N	100
801	PES High Flow/MBS housing, luer slip outlet, sterile, 0.45 µm, syringe filter	28	SF-801-05-28-LS-N	100
802	PES High Flow/MBS housing, luer lock outlet, non-sterile, 0.2 µm, syringe filter	28	SF-802-02-28-LL-N	100
802	PES High Flow/MBS housing, luer lock outlet, non-sterile, 0.45 µm, syringe filter	28	SF-802-05-28-LL-N	100
802	PES High Flow/MBS housing, luer slip outlet, non-sterile, 0.45 µm, syringe filter	28	SF-802-05-28-LS-N	100
803	PES High flow/MBS housing, luer lock outlet, sterile, 0.2 µm, syringe filter	28	SF-803-02-28-LL-N	100
803	PES High flow/MBS housing, luer slip outlet, sterile, 0.45 µm, syringe filter	28	SF-803-05-28-LS-N	100
804	PES/PP housing, luer lock outlet, sterile, 0.2 µm, 15 mm, syringe filter	15	SF-804-02-15-LL-N	100
805	CA/MBS housing, male luer slip outlet, sterile, 0.2 µm, 28 mm, syringe filters	28	SF-805-02-28-MLS-N	100
805	CA/MBS housing, luer lock outlet, sterile, 0.2 µm, 28 mm, syringe filters	28	SF-805-02-28-LL-N	100
805	CA/MBS housing, male luer slip outlet, sterile, 0.45 µm, 28 mm, syringe filters	28	SF-805-05-28-MLS-N	100
805	CA/MBS housing, luer lock outlet, sterile, 0.45 µm, 28 mm, syringe filters	28	SF-805-05-28-LL-N	100
805	CA/MBS housing, luer slip outlet, sterile, 0.65 µm, 28 mm, syringe filters	28	SF-805-07-28-LS-N	100
805	CA/MBS housing, luer lock outlet, sterile, 0.8 µm, 28 mm, syringe filters	28	SF-805-08-28-LL-N	100
805	CA/MBS housing, luer lock outlet, sterile, 1.2 µm, 26 mm, syringe filters	26	SF-805-12-26-LL-N	100
805	CA/MBS housing, luer lock outlet, sterile, 5 µm, 26 mm, syringe filters	26	SF-805-50-26-LL-N	100
806	CA/MBS housing, male luer slip outlet, non-sterile, 0.2 µm, 28 mm, syringe filters	28	SF-806-02-28-MLS-N	100
806	CA/MBS housing, luer lock outlet, non-sterile, 0.2 µm, 28 mm, syringe filters	28	SF-806-02-28-LL-N	100
806	CA/MBS housing, male luer slip outlet, non-sterile, 0.45 µm, 28 mm, syringe filters	28	SF-806-05-28-MLS-N	100
806	CA/MBS housing, luer lock outlet, non-sterile, 0.45 µm, 28 mm, syringe filters	28	SF-806-05-28-LL-N	100
806	CA/MBS housing, luer lock outlet, non-sterile, 0.8 µm, 28 mm, syringe filters	28	SF-806-08-28-LL-N	100



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Syringe Filters K&R Filter Brand

Grade	Description	Size in mm	Part Numbers	Packaging
806	CA/MBS housing, luer lock outlet, non-sterile, 1.2 µm, 26 mm, syringe filters	26	SF-806-12-26-LL-N	100
806	CA/MBS housing, luer lock outlet, non-sterile, 5 µm, 26 mm, syringe filters	26	SF-806-50-26-LL-N	100
807	CA/MBS housing, luer lock outlet, non-sterile, 0.2 µm, 28 mm, syringe filters	28	SF-807-02-28-LL-N	100
807	CA/MBS housing, luer lock outlet, non-sterile, 0.45 µm, 28 mm, syringe filters	28	SF-807-05-28-LL-N	100
808	CA/PP housing, luer outlet, sterile, 0.22 µm, 25 mm, syringe filters	25	SF-808-02-25-LO-N	100
808	CA/PP housing, luer outlet, sterile, 0.45 µm, 25 mm, syringe filters	25	SF-808-05-25-LO-N	100
809	CA/PP housing, luer outlet, non-sterile, 0.22 µm, 25 mm, syringe filters	25	SF-809-02-25-LO-N	100
809	CA/PP housing, luer outlet, non-sterile, 0.8 µm, 25 mm, syringe filters	25	SF-809-08-25-LO-N	100
810	GF/CA/MBS housing, luer lock outlet, 0.2 µm, 26 mm, sterile, syringe filter	26	SF-810-02-26-LL-N	100
810	GF/CA/MBS housing, luer lock outlet, 0.45 µm, 26 mm, sterile, syringe filter	26	SF-810-05-26-LL-N	100
811	GF/CA/MBS housing, luer lock outlet, 0.2µm, 26mm, non-sterile, syringe filters	26	SF-811-02-26-LL-N	100
811	GF/CA/MBS housing, luer lock outlet, 0.45 µm, 26mm, non-sterile, syringe filters	26	SF-811-05-26-LL-N	100
811	GF/CA/MBS housing, luer lock outlet, 1.2 µm, 26mm, non-sterile, syringe filters	26	SF-811-12-26-LL-N	100
812	GF/MBS housing, luer slip, ~ 1 µm, 28 mm, non-sterile, syringe filters	28	SF-812-10-28-LS-N	100
812	GF/MBS housing, luer lock outlet, ~ 1 µm, 26 mm, sterile, syringe filters	26	SF-812-10-26-LL-N	100
813	GF/MBS housing, luer lock outlet, ~ 1 µm, 26 mm, non-sterile, syringe filters	26	SF-813-10-26-LL-N	100
814	PTFE/MBS housing, luer lock outlet, 0.2 µm, 26 mm, sterile, syringe filters	26	SF-814-02-26-LL-N	100
815	PTFE/MBS housing, luer slip outlet, 0.2 µm, 15 mm, non-sterile, syringe filters	15	SF-815-02-15-LS-N	100
815	PTFE/MBS housing, luer lock outlet, 0.2 µm, 26 mm, non-sterile, syringe filters	26	SF-815-02-26-LL-N	100
815	PTFE/MBS housing, luer slip outlet, 0.2 µm, 26 mm, non-sterile, syringe filters	26	SF-815-02-26-LS-N	100
816	PTFE/PP housing, luer outlet, 0.2 µm, 15 mm, sterile, syringe filters	15	SF-816-02-15-LO-N	100
816	PTFE/PP housing, luer outlet, 0.22 µm, 25 mm, sterile, syringe filters	25	SF-816-02-25-LO-N	100
817	PTFE/PP housing, luer outlet, 0.2 µm, 15 mm, non-sterile, syringe filters	15	SF-817-02-15-LO-N	100
817	PTFE/PP housing, luer outlet, 0.2 µm, 25 mm, non-sterile, syringe filters	25	SF-817-02-25-LO-N	100

Syringe Filters K&R Filter Brand

Grade	Description	Size in mm	Part Numbers	Packaging
817	PTFE/PP housing, spike outlet, 0.45 µm, 15 mm, non-sterile, syringe filters	15	SF-817-05-15-SO-N	100
817	PTFE/PP housing, luer slip outlet, 0.45 µm, 4 mm, non-sterile, syringe filters	4	SF-817-05-04-LS-S	200
817	PTFE/PP housing, luer outlet, 0.45 µm, 15 mm, non-sterile, syringe filters	15	SF-817-05-15-LO-N	100
817	PTFE/PP housing, luer outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-817-05-25-LO-N	100
817	PTFE/PP housing, luer outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-817-05-25-LO-N	100
818	NY/PP housing, luer slip outlet, 0.2 µm, 25 mm, sterile, syringe filters	25	SF-818-02-25-LS-N	100
818	NY/PP housing, luer slip outlet, 0.45 µm, 25 mm, sterile, syringe filters	25	SF-818-05-25-LS-N	100
819	NY/PP housing, luer slip outlet, 0.2 µm, 15 mm, non-sterile, syringe filters	15	SF-819-02-15-LS-N	100
819	NY/PP housing, luer slip outlet, 0.2 µm, 15 mm, non-sterile, syringe filters	15	SF-819-02-15-LS-Q	500
819	NY/PP housing, luer slip outlet, 0.2 µm, 25 mm, non-sterile, syringe filters	25	SF-819-02-25-LS-Q	500
819	NY/PP housing, luer outlet, 0.22 µm, 25 mm, non-sterile, syringe filters	25	SF-819-02-25-LO-N	100
819	NY/PP housing, luer slip outlet, 0.45 µm, 15 mm, non-sterile, syringe filters	15	SF-819-05-15-LS-K	50
819	NY/PP housing, luer slip outlet, 0.45 µm, 15 mm, non-sterile, syringe filters	15	SF-819-05-15-LS-Q	500
819	NY/PP housing, luer slip outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-819-05-25-LS-Q	500
819	NY/PP housing, luer outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-819-05-25-LO-N	100
820	GF/NY/MBS hous., luer slip outlet, 0.2 µm, 25 mm, non-sterile, syringe filters	25	SF-820-02-25-LS-N	100
820	GF/NY/MBS hous., luer slip outlet, 0.45 µm, 25mm, non-sterile, syringe filters	25	SF-820-05-25-LS-N	100
821	RC/PP housing, luer slip outlet, 0.2 µm, 15 mm, sterile, syringe filters	15	SF-821-02-15-LS-N	100
821	RC/PP housing, luer slip outlet, 0.2 µm, 25 mm, sterile, syringe filters	25	SF-821-02-25-LS-N	100
822	RC/PP housing, luer slip outlet, 0.2 µm, 15 mm, non-sterile, syringe filters	15	SF-822-02-15-LS-N	100
822	RC/PP housing, luer slip outlet, 0.2 µm, 25 mm, non-sterile, syringe filters	25	SF-822-02-25-LS-N	100
822	RC/PP housing, luer slip outlet, 0.2 µm, 4 mm, non-sterile, syringe filters	4	SF-822-02-04-LS-S	200
822	RC/PP housing, luer slip outlet, 0.45 µm, 4 mm, non-sterile, syringe filters	4	SF-822-05-04-LS-S	200
822	RC/PP housing, luer slip outlet, 0.45 µm, 15 mm, non-sterile, syringe filters	15	SF-822-05-15-LS-N	100



Microfiltration

Syringe Filters K&R Filter Brand

Grade	Description	Size in mm	Part Numbers	Packaging
822	RC/PP housing, luer slip outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-822-05-25-LS-N	100
823	PVDF/PP housing, luer outlet, 0.22 µm, 13 mm, non-sterile, syringe filters	13	SF-823-02-13-LO-N	100
823	PVDF/PP housing, luer outlet, 0.45 µm, 13 mm, non-sterile, syringe filters	13	SF-823-05-13-LO-N	100
823	PVDF/PP housing, luer outlet, 0.45 µm, 25 mm, non-sterile, syringe filters	25	SF-823-05-25-LO-N	100

Syringe Filters Original GVS Brand



Abluo Color Coding

CA (Cellulose Acetate)		
0.22 µm		blue
0.45 µm		yellow
0.45 µm		green
1.2 µm		red
5.0 µm		brown

Nylon		
All pore sizes		transparent

Polyethersulfone		
All pore sizes		transparent

Mixed Cellulose Ester		
All pore sizes		transparent

Regenerated Cellulose		
All pore sizes		transparent

Polyvinylidene Fluoride		
All pore sizes		transparent

Polytetrafluorethylene-Teflon		
All pore sizes		transparent

Polyethylene		
All pore sizes		transparent

Glass Fibre		
All pore sizes		transparent

Abluo - NON-STERILE				
Material	Dimension in mm	Pore size	Part Number	Packaging
Cellulose Acetate	13	0.22 µm	FJ13ANC-CA002DD01	500
	13	0.45 µm	FJ13ANC-CA004FD01	500
	13	0.8 µm	FJ13ANC-CA008ED01	500
	13	1.2 µm	FJ13ANC-CA012CD01	500
	13	5.0 µm	FJ13ANC-CA050PD01	500
	25	0.22 µm	FJ25ANC-CA002DD01	500
	25	0.45 µm	FJ25ANC-CA004DD01	500
	25	0.8 µm	FJ25ANC-CA008DD01	500
	25	1.2 µm	FJ25ANC-CA012DD01	500
	25	5.0 µm	FJ25ANC-CA050DD01	500
Nylon	13	0.22 µm	FJ13BN-PNY002AD01	500
	13	0.45 µm	FJ13BN-PNY004AD01	500
	25	0.22 µm	FJ25BN-PNY002AD01	500
	25	0.45 µm	FJ25BN-PNY004AD01	500
Polyethersulfone	13	0.22 µm	FJ13BN-PPS002AD01	500
	13	0.45 µm	FJ13BN-PPS004AD01	500
	25	0.22 µm	FJ25BN-PPS002AD01	500
	25	0.45 µm	FJ25BN-PPS004AD01	500
Mixed Cellulose Ester	13	0.22 µm	FJ13BNPN-C002AD01	500
	13	0.45 µm	FJ13BNPN-C004AD01	500
	25	0.22 µm	FJ25BNPN-C002AD01	500
	25	0.45 µm	FJ25BNPN-C004AD01	500
Regenerated Cellulose	13	0.22 µm	FJ13BNPR-C002AD01	500
	13	0.45 µm	FJ13BNPR-C004AD01	500



Microfiltration

Abluo - Non-Sterile				
Material	Dimension in mm	Pore size	Part Number	Packaging
Regenerated Cellulose	25	0.22 µm	FJ25BNPR-C002AD01	500
	25	0,45 µm	FJ25BNPR-C004AD01	500
Polyvinylidene Fluoride	13	0.22 µm	FJ13BNPP-V002AD01	500
	13	0,45 µm	FJ13BNPP-V004AD01	500
	25	0.22 µm	FJ25BNPP-V002AD01	500
	25	0.45 µm	FJ25BNPP-V004AD01	500
Polytetrafluorethylene-Teflon	13	0.22 µm	FJ13BN-PPT002AD01	500
	13	0.22 µm	FJ13BNPP-H002AD01	500
	13	0.45 µm	FJ13BN-PPT004AD01	500
	13	0.45 µm	FJ13BNPP-H004AD01	500
	25	0.22 µm	FJ25BN-PPT002AD01	500
	25	0.22 µm	FJ25BNPP-H002AD01	500
	25	0.45 µm	FJ25BN-PPT004AD01	500
	25	0.45 µm	FJ25BNPP-H004AD01	500
Polyethylene	13	0.22 µm	FJ13BN-PPE002AD01	500
	13	0.45 µm	FJ13BN-PPE005AD01	500
	25	0.22 µm	FJ25BN-PPE002AD01	500
	25	0.45 µm	FJ25BN-PPE004AD01	500
Glass fiber	25	0.65 µm	FJ25BNPG-F007AD01	500
	25	1.0 µm	FJ25BNPG-F010AD01	500
	25	1.2 µm	FJ25BNPG-F012AD01	500
	25	3.1 µm	FJ25BNPG-F031AD01	500

Abluo- Sterile				
Material	Dimension in mm	Pore size	Part No.	Packaging
Cellulose Acetate	13	0.22 µm	FJ13ASC-CA002DL01	50
	13	0.45 µm	FJ13ASC-CA004FL01	50
	13	0.8 µm	FJ13ASCCA-008EL01	50
	13	1.2 µm	FJ13ASC-CA012CL01	50
	13	5.0 µm	FJ13ASCCA-050PL01	50
	25	0.22 µm	FJ25ASC-CA002DL0	50
	25	0.45 µm	FJ25ASC-CA004DL01	50
	25	0.8 µm	FJ25ASC-CA008DL01	50
	25	1.2 µm	FJ25ASC-CA012DL01	50
	25	5.0 µm	FJ25ASC-CA050DL01	50
Polyethersulfone	13	0.22 µm	FJ13B-SCPS002AL01	50
	13	0.45 µm	FJ13B-SCPS004AL01	50
	25	0.22 µm	FJ25B-SCPS002AL01	50
	25	0.45 µm	FJ25B-SCPS004AL01	50
Polyvinylidene Fluoride	13	0.22 µm	FJ13BSCP-V002AL01	50
	13	0.45 µm	FJ13BSCP-V004AL01	50
	25	0.22 µm	FJ25BSCP-V002AL01	50
	25	0.45 µm	FJ25BSCP-V004AL01	50

Abluo - Non-Sterile with Prefilter				
Cellulose Acetate	25	0.45 µm	FJ25BN-PGA004AD01	500
Nylon	25	0.45 µm	FJ25BNPG-N004AD01	500
PTFE-Teflon	25	0.45 µm	FJ25BNPG-T004AD01	500
Polyethylene	25	0.45 µm	FJ25BNPG-P005AD01	500



Microfiltration

Re-enforced Cameo-Non Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Cellulose Acetate	3	0.22 µm	1213629	100
	3	0.22 µm	1214144	500
	3	0.45 µm	1213700	100
	3	0.45 µm	1215164	500
	17	0.22 µm	1225617	50
	17	0.22 µm	1225618	200
	17	0.22 µm	1225619	500
	17	0.22 µm	1233871	1000
	17	0.22 µm	3052931	100
	17	0.45 µm	1225620	50
	17	0.45 µm	1225622	200
	17	0.45 µm	1225623	500
	17	0.45 µm	3052932	100
	17	0.45 µm	1242303	5000
	17	0.45 µm	1233882	1000
	30	0.22 µm	1213192	200
	30	0.22 µm	1213641	50
	30	0.22 µm	1229443	1000
	30	0.22 µm	1270152	5000
	30	0.22 µm	1214014	500
	30	0.45 µm	1214778	50
	30	0.45 µm	1214932	200
	30	0.45 µm	1229444	1000
	30	0.45 µm	1227275	5000
	30	0.45 µm	3052902	100
	30	0.45 µm	1214966	500
	30	0.8 µm	1226939	50
	30	0.8 µm	1226940	500
	30	0.8 µm	1226941	200
	30	0.8 µm	1229445	1000
Nylon	3	0.22 µm	1213705	100
	3	0.22 µm	1235258	5000
	3	0.22 µm	1213706	500
	3	0.45 µm	1213721	100
	3	0.45 µm	1214946	5000
	3	0.45 µm	1213722	500
	3	5.0 µm	1213742	100
	3	5.0 µm	1213743	500
	17	0.22 µm	1224746	50
	17	0.22 µm	1224747	200
	17	0.22 µm	1224748	500
	17	0.22 µm	1224749	5000
	17	0.22 µm	3052967	100
	17	0.45 µm	1224753	50



Re-enforced Cameo-Non Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Nylon	17	0.45 µm	1224754	200
	17	0.45 µm	1224755	500
	17	0.45 µm	1224756	5000
	17	0.45 µm	3050466	100
	17	1.2 µm	1224760	50
	17	1.2 µm	1224761	200
	17	5.0 µm	1224763	50
	17	5.0 µm	1224764	200
	17	5.0 µm	1224765	500
	30	0.1 µm	1224100	50
	30	0.1 µm	1224101	200
	30	0.1 µm	1224103	500
	30	0.1 µm	1229459	1000
	30	0.22 µm	1224104	50
	30	0.22 µm	1224105	200
	30	0.22 µm	1224106	500
	30	0.22 µm	1224110	5000
	30	0.22 µm	1229461	1000
	30	0.22 µm	1236736	100
	30	0.45 µm	1224112	50
	30	0.45 µm	1224113	200
	30	0.45 µm	1224114	500
	30	0.45 µm	1224117	5000
	30	0.45 µm	1226917	1000
	30	0.45 µm	1236737	100
	30	1.2 µm	1224119	50
	30	1.2 µm	1224120	200
	30	1.2 µm	1224121	500
	30	1.2 µm	1229463	1000
	30	1.2 µm	3052909	100
	30	5.0 µm	1224124	50
	30	5.0 µm	1224125	200
	30	5.0 µm	1224126	500
	30	5.0 µm	1229465	1000
	30	5.0 µm	3019424	5000
	30	5.0 µm	1236738	100
Polytetrafluor-ethylene-Teflon	17	0.22 µm	1224780	50
	17	0.22 µm	1224781	200
	17	0.22 µm	1224782	500
	17	0.22 µm	1224783	5000
	17	0.22 µm	1229447	1000
	17	0.22 µm	1224780	50
	17	0.22 µm	1262414	200
	17	0.22 µm	1224781	500



Microfiltration

Re-enforced Cameo-Non Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Polytetrafluor-ethylene-Teflon	17	0.22 µm	1224783	5000
	17	0.45 µm	1224787	50
	17	0.45 µm	1224788	200
	17	0.45 µm	1224789	500
	17	0.45 µm	1224790	5000
	17	0.45 µm	1229449	1000
	17	0.45 µm	1262415	100
	30	0.22 µm	1224143	50
	30	0.22 µm	1224144	200
	30	0.22 µm	1224145	500
	30	0.22 µm	1224146	5000
	30	0.22 µm	1229448	1000
	30	0.22 µm	1262412	100
	30	0.45 µm	1224150	50
	30	0.45 µm	1224151	200
	30	0.45 µm	1224153	5000
	30	0.45 µm	1229450	1000
	30	0.45 µm	1262413	100
	30	0.45 µm	1237721	500
Polypropylene MB	17	0.22 µm	1224808	50
	17	0.22 µm	1224809	200
	17	0.22 µm	1224810	500
	17	0.22 µm	1225602	5000
	17	0.22 µm	1229452	1000
	17	0.22 µm	3052936	100
	17	0.45 µm	1224811	50
	17	0.45 µm	1224812	200
	17	0.45 µm	1224813	500
	17	0.45 µm	1225607	5000
	17	0.45 µm	1229454	1000
	17	0.45 µm	3052937	100
	30	0.22 µm	1224172	50
	30	0.22 µm	1224173	200
	30	0.22 µm	1224174	500
	30	0.22 µm	1229453	1000
	30	0.22 µm	1237235	5000
	30	0.22 µm	3052934	100
	30	0.45 µm	1224310	50
	30	0.45 µm	1224311	200
Polyethersulfone	17	0.22 µm	1233547	50
	17	0.22 µm	1233544	1000
	17	0.22 µm	3049950	5000

Re-enforced Cameo-Non Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Polyethersulfone	17	0.45 µm	1233548	50
	17	0.45 µm	1233545	1000
	17	0.45 µm	3019423	5000
	30	0.22 µm	1233549	50
	30	0.22 µm	1233541	1000
	30	0.22 µm	3052903	100
	30	0.45 µm	1233550	50
	30	0.45 µm	1233543	1000
	30	0.45 µm	3052904	100
	30	0.45 µm	1233551	500
	30	0.45 µm	1234103	5000
Polyvinylidene Fluoride	17	0.22 µm	3049952	1000
	17	0.22 µm	3062886	5000
	17	0.45 µm	3023187	1000
	17	0.45 µm	3023135	50
	17	0.45 µm	3052969	100
	17	0.45 µm	3023188	500
	17	0.45 µm	3062884	5000
	30	0.22 µm	3038551	50
	30	0.22 µm	3038552	1000
	30	0.22 µm	3052905	100
	30	0.22 µm	3062887	5000
	30	0.45 µm	3020528	50
	30	0.45 µm	3020351	500
	30	0.45 µm	3023084	1000
	30	0.45 µm	3049953	5000
	30	0.45 µm	3052906	100

Re-enforced Cameo- Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Cellulose Acetate	3	0.22 µm	1212692	100
	3	0.22 µm	1213648	500
	3	0.45 µm	1213710	100
	3	0.45 µm	1213716	500
	25	0.22 µm	1213657	50
	25	0.22 µm	1213678	200
	25	0.22 µm	1213667	500
	25	0.22 µm	1214344	50
	25	0.22 µm	1214349	200
	25	0.22 µm	1214346	500
	25	0.22 µm	1221496	1000
	25	0.22 µm	1224304	1000
	25	0.45 µm	1213723	50
	25	0.45 µm	1213739	200



Microfiltration

Re-enforced Cameo- Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Cellulose Acetate	25	0.45 µm	1213731	500
	25	0.45 µm	1214358	50
	25	0.45 µm	1214360	200
	25	0.45 µm	1214359	500
	25	0.45 µm	1215245	1000
	25	0.45 µm	1224305	1000
	25	0.8 µm	1212630	50
	25	0.8 µm	1213122	200
	25	0.8 µm	1213758	50
	25	0.8 µm	1213767	500
	25	0.8 µm	1222378	500
	25	0.8 µm	1262953	1000
Nylon	25	0.1 µm	1213699	50
	25	0.1 µm	1213701	500
	25	0.1 µm	1213702	200
	25	0.22 µm	1213708	50
	25	0.22 µm	1213711	200
	25	0.22 µm	1213709	500
	25	0.22 µm	1215268	1000
	25	0.45 µm	1213724	50
	25	0.45 µm	1213726	200
	25	0.45 µm	1213725	500
	25	0.45 µm	1221513	1000
	25	1.2 µm	1213737	50
	25	1.2 µm	1213740	200
	25	1.2 µm	1213738	500
	25	1.2 µm	1239715	1000
	25	5.0 µm	1213744	50
	25	5.0 µm	1213746	200
	25	5.0 µm	1213745	500
	25	5.0 µm	1239369	1000
Polyethersulfone	25	0.22 µm	1214220	50
	25	0.22 µm	1215190	200
	25	0.22 µm	1222370	200
	25	0.22 µm	1214904	500
	25	0.22 µm	1222369	500
	25	0.22 µm	1222388	50
	25	0.45 µm	1215130	50
	25	0.45 µm	1215146	50
	25	0.45 µm	1222266	200
	25	0.45 µm	3012605	500
	25	0.45 µm	1223379	1000
	25	0.45 µm	1224085	1000
	25	0.8 µm	1222374	50

Re-enforced Cameo- Sterile				
Material	Dimension in mm	Pore Size	Part Number	Packaging
	25	0.8 µm	1222375	500
	25	0.8 µm	1222395	50
	25	8.0 µm	3038584	1000
Mixed Cellulose Ester	25	0.22 µm	1213785	50
	25	0.22 µm	1213806	200
	25	0.22 µm	1213795	500
	25	0.22 µm	1224307	1000
	25	0.45 µm	1213814	50
	25	0.45 µm	1213828	200
	25	0.45 µm	1213822	500
	25	0.45 µm	1224306	1000
Glass Fibre	25	1.0 µm	1212701	50

Re-enforced Cameo- with Prefilter				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Cellulose Acetate	30	0.22 µm	1226942	50
	30	0.22 µm	1226944	200
	30	0.22 µm	1226943	500
	30	0.22 µm	1229466	1000
	30	0.22 µm	3050049	5000
	30	0.22 µm	On Request	On Request
	30	0.45 µm	1226945	50
	30	0.45 µm	1226947	200
	30	0.45 µm	1226946	500
	30	0.45 µm	1229467	1000
	30	0.45 µm	1270153	5000
	30	0.8 µm	1226939	50
	30	0.8 µm	1226941	200
	30	0.8 µm	1226940	500
	30	0.8 µm	1226951	500
	30	0.8 µm	1226950	200
Nylon	17	0.22 µm	1224766	50
	17	0.22 µm	1224767	200
	17	0.22 µm	1224768	500
	17	0.22 µm	1224769	5000
	17	0.22 µm	1229477	1000
	17	0.45 µm	1224773	50
	17	0.45 µm	1224774	200
	17	0.45 µm	1224775	500
	17	0.45 µm	1224776	5000
	17	0.45 µm	1229479	1000
	30	0.22 µm	1224127	50
	30	0.22 µm	1224128	200
	30	0.22 µm	1224129	500



Microfiltration

Re-enforced Cameo- with Prefilter				
Material	Dimension in mm	Pore Size	Part Number	Packaging
Nylon	30	0.22 µm	1224133	5000
	30	0.22 µm	3061711	100
	30	0.45 µm	1224135	50
	30	0.45 µm	1224136	200
	30	0.45 µm	1224137	500
	30	0.45 µm	1224138	5000
	30	0.45 µm	1226916	1000
	30	0.45 µm	3053044	100
Polytetrafluoroethylene-Teflon	17	0.22 µm	1224794	50
	17	0.22 µm	1224795	200
	17	0.22 µm	1224796	500
	17	0.22 µm	1224797	5000
	17	0.22 µm	1229469	1000
	17	0.45 µm	1224801	50
	17	0.45 µm	1224802	200
	17	0.45 µm	1224803	500
	17	0.45 µm	1224804	5000
	17	0.45 µm	1229471	1000
	30	0.22 µm	1224157	50
	30	0.22 µm	1224158	200
	30	0.22 µm	1224159	500
	30	0.22 µm	1224160	5000
	30	0.22 µm	1229470	1000
	30	0.22 µm	On Request	On Request
	30	0.45 µm	1224164	50
	30	0.45 µm	1224165	200
	30	0.45 µm	1224166	500
	30	0.45 µm	1224167	5000
	30	0.45 µm	1229472	1000
Polypropylene MB	17	0.22 µm	1224814	50
	17	0.22 µm	1224815	200
	17	0.22 µm	1229473	1000
	17	0.22 µm	On Request	On Request
	17	0.22 µm	On Request	On Request
	17	0.22 µm	On Request	On Request
	17	0.45 µm	1224817	50
	17	0.45 µm	1224818	200
	17	0.45 µm	1229475	1000
	17	0.45 µm	1229481	500
	30	0.22 µm	1224175	50
	30	0.22 µm	1224176	200
	30	0.22 µm	1224177	500
	30	0.22 µm	1229474	1000
	30	0.22 µm	On Request	On Request

Re-enforced Cameo- with Prefilter

Material	Dimension in mm	Pore Size	Part Number	Packaging
Polypropylene MB	30	0.22 µm	On Request	On Request
	30	0.45 µm	1224313	50
	30	0.45 µm	1224314	200
	30	0.45 µm	1224315	500
	30	0.45 µm	1229476	1000
	30	0.45 µm	3013493	5000
Glass Fibre	30	1.0 µm	1226150	5000
	30	1.0 µm	1227204	50
	30	1.0 µm	1227205	500
	30	1.0 µm	1229451	1000
	30	1.0 µm	3052938	100



Vent Filters

Vent filters can provide a sterile barrier for air or gases entering or exiting vessels such as bioreactors, fermentation tanks, or carboys. These filters maintain the sterility of the interior environment and protect the atmosphere from contaminants within the vessel.

They contain hydrophobic media, which prevent the entry of water and aerosols into sensitive equipment and also protect the lab environment from aerosolized pathogens. Vent filters can also enable air to enter and exit vessels such as bioreactors, while maintaining the sterility of the interior environment.

Non Sterile

Material	Dimension in mm	Pore size	Part Number	Packaging
Polytetrafluoroethylene	50	0.22 µm	VF50ANPPT002AC01	100
	50	0.45 µm	VF50ANPPT004AC01	100
Glass Fibre	40	retention	VF40CBPGF000AL01	50

Sterile

Material	Dimension in mm	Pore size	Part Number	Packaging
Polytetrafluoroethylene	50	0.22 µm	VF50ASPPT002AX01	10
	50	0.45 µm	VF50ASPPT004AX01	10
Glass Fibre	40	retention	VF40CSPGF000AX01	10



Bottle Top Filtration Systems

Bottle-Top Vacuum Filtration Systems are designed for the preparation of buffers, tissue culture media, microbiological media, and other biological fluids.

Our disposable, ready-to-use vacuum filtration units are of outstanding quality and offer the highest reliability for whatever separation task you may be looking at.

Zapcap- Non Sterile

Material	Pore size	Part Number	Packaging
Nylon	0.22 µm	10443421	12
	0.45 µm	10443423	12

Zapcap- Sterile

Cellulose Acetate	0.22 µm	10443401	12
	0.45 µm	10443411	12
Cellulose Acetate with Glass Fibre	0.22 µm	10443430	12
	0.45 µm	10443435	12



Environmental Monitoring



In our world of industrialization it is more important than ever to reduce pollution and contamination as much as possible. The environment in which we live has a direct effect on every living organism: Microorganisms, plants, animals, and human beings.

In order to protect our environment, a great deal of legislation, regulations, and standards have been implemented that are mandatory for industries, motor vehicles, households, and individuals. Adequate and precise environmental monitoring is a key element when trying to reduce pollution and contamination.

Most of the laboratories conducting environmental monitoring use techniques that are based on filtration. K&R Filter offers state-of-the-art filter media on the basis of micro-glass and micro-quartz fibres that are being used for both water and air pollution monitoring in many parts of the world.

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Air Pollution Control

The necessity of monitoring emissions on a regular and sometimes permanent basis has inspired the development of a specific set of methods and techniques for the relevant industries.

Many of the air quality analysis can be performed with traditional filter papers. However, some analysis require materials with specific features, for example filters with low metal levels.

Many gravimetric methods for the determination of particulate matter in the atmosphere are based on collection onto a high-efficiency glass microfibre or quartz filter. This process involves the collection of airborne particulates by medium- or high-volume air sampling, typically over a period of eight hours or longer. The mass of particulate matter is determined by weighing the filter before and after sampling.

K&R Filter offers a wide range of micro-glass fibre filters, with and without binder, suitable for gravimetric particulate testing. Wherever extremely high temperatures are required, our micro-quartz fibre filters are the product of choice.

Micro-Quartz Fibre Filters

Characteristics

1. Temperature resistant up to 900°C
2. Binder-free
3. Suitable for low amount pf particles
4. Highest purity (low presence of trace emelemnts)

Applications

1. Test of hot „stack“ gases
2. Analysis of acidic gases

Technical Data

Grade	Basis weight in g/m ²	Thickness in mm
QMS	88	0.46

Grade	Retention in µm (liquid)	Surface characteristics
QMS	1.6	Smooth

Grade	Air resistance in mbar	Max. temperature
QMS	47	900°C



Part Numbers		Part Numbers	
Part Number	Packaging	Part Number	Packaging
Circles		Circles	
C-QMS-021-K	50	C-QMS-070-K	50
C-QMS-024-K	50	C-QMS-082-K	50
C-QMS-025-K	50	C-QMS-085-K	50
C-QMS-027-K	50	C-QMS-090-K	50
C-QMS-028-K	50	C-QMS-100-K	50
C-QMS-030-K	50	C-QMS-105-K	50
C-QMS-032-K	50	C-QMS-110-K	50
C-QMS-035-K	50	C-QMS-120-K	50
C-QMS-037-K	50	C-QMS-125-K	50
C-QMS-042-5-K	50	C-QMS-150-K	50
C-QMS-045-K	50	C-QMS-185-K	50
C-QMS-047-K	50	C-QMS-240-K	50
C-QMS-050-K	50	C-QMS-320-K	50
C-QMS-052-K	50	Sheets	
C-QMS-055-K	50	S-QMS-2025-K	50

Micro-Glass Fibre Extraction Thimbles

Characteristics and Applications	Technical Data	
1. Made from micro-glass fibres	Internal diameter	Value in mm
2. Used for collection of dust particles and aerosols from gaseous streams	Thimble height	Value in mm
3. High temperature resistance (500°C)	Wall thickness in mm	2.0
4. Good chemical resistance	Penetration in %	0.002
	Max. temperature	500°C

Part Numbers		
Size in mm	Part Number	Packaging
16x50	TG-405-1650-G	25
19x90	TG-405-1990-G	25
22x80	TG-405-2280-G	25
25x80	TG-405-2580-G	25
25x100	TG-405-25100-G	25
30x77	TG-405-3077-G	25
30x95	TG-405-3095-G	25
30x100	TG-405-30100-G	25
33x80	TG-405-3380-G	25
33x94	TG-405-3394-G	25
35x150	TG-405-35150-G	25
43x123	TG-405-43123-G	25



Water Pollution Control

Water is a precious good that needs our special protection. There are many ways of assessing the quality of water. Water can be contaminated physically, chemically and biologically. Physical contamination refers to solid, filterable material present in the water sample. Chemical contamination includes dissolved heavy metals, nitrogen compounds and organic carbon. Biological contamination can be caused by bacteria and microorganisms present in the water sample.

Common water monitoring procedures include the determination of Total Suspended Solids using micro-glass fibre filters, analysis of heavy metal and ion content using syringe filters for sample preparation as well as microbiological analysis using sterile, gridded membrane filters. Our product range includes highly performant filters for all of the above analysis procedures.

Micro-Glass Fibre Filters without Binder

Applications

1. Binderless micro-glass fibre filters are used for the analysis of water samples
2. Determination of TSS (Total Suspended Solids) in water

GMA	High efficiency proved for general laboratory filtration, i.e. clarification of buffer and reagent solutions, filtration of algae, proteins, foodstuff analysis or bacteria cultures. GMA corresponds to many international standards for air and water pollution monitoring.
GMB	This grade is suitable for filtration of large volumes, as pre-filter for membranes, waste water analysis or filtration of suspended solids in water.
GMC	GMC is used as standard filter media for the monitoring and clarification of waste water and water in general, scintillation counting on the filter, cell harvesting and hydrocarbon analysis where cellulose fibers are an inconvenience.
GMD	This grade is mainly used as universal membrane pre-filter material
GMF	GMF has got a higher efficiency in particle retention for smaller particles than other glass fibre grades. GMF is applied for the clarification of protein solutions and filtration of liquids prior to HPLC
GMG	Applied for the filtration and monitoring of water

Technical Data

Grade	Basis weight in g/m ²	Thickness in mm
GMA	52	0.25
GMB	143	0.70
GMC	52	0.26
GMD	120	0.53
GMF	75	0.45
GMG	65	0.28

Technical Data

Grade	Retention in μm (liquid)	Surface characteristics
GMA	1.6	Smooth
GMB	1.0	Smooth
GMC	1.2	Smooth
GMD	2.7	Smooth
GMF	0.7	Smooth
GMG	1.5	Smooth
Grade	Penetration in %	Max. temperature
GMA	< 0.002	500°C
GMB	< 0.002	500°C
GMC	< 0.002	500°C
GMD	< 0.1	500°C
GMF	< 0.002	500°C
GMG	< 0.002	500°C
Grade	Air resistance in mbar	
GMA	38	
GMB	95	
GMC	55	
GMD	140	
GMF	120	
GMG	30	

Part Numbers

	Grade			
	GMA		GMB	
Size in mm	Part Number	Packaging	Part Number	Packaging
Circles				
21	C-GMA-021-N	100	C-GMB-021-K	50
24	C-GMA-024-N	100	C-GMB-024-K	50
25	C-GMA-025-N	100	C-GMB-025-K	50
27	C-GMA-027-N	100	C-GMB-027-K	50
28	C-GMA-028-N	100	C-GMB-028-K	50
30	C-GMA-030-N	100	C-GMB-030-K	50
32	C-GMA-032-N	100	C-GMB-032-K	50
35	C-GMA-035-N	100	C-GMB-035-K	50
37	C-GMA-037-N	100	C-GMB-037-K	50
42.5	C-GMA-042-5-N	100	C-GMB-042-5-K	50
45	C-GMA-045-N	100	C-GMB-045-K	50
47	C-GMA-047-N	100	C-GMB-047-K	50
50	C-GMA-050-N	100	C-GMB-050-K	50
52	C-GMA-052-N	100	C-GMB-052-K	50
55	C-GMA-055-N	100	C-GMB-055-K	50
70	C-GMA-070-N	100	C-GMB-070-K	50
82	C-GMA-082-N	100	C-GMB-082-K	50
85	C-GMA-085-N	100	C-GMB-085-K	50
90	C-GMA-090-N	100	C-GMB-090-K	50



Environmental Monitoring

Part Numbers

Size in mm	Grade			
	GMA		GMB	
	Part Number	Packaging	Part Number	Packaging
Circles				
100	C-GMA-100-N	100	C-GMB-100-K	50
105	C-GMA-105-N	100	C-GMB-105-K	50
110	C-GMA-110-N	100	C-GMB-110-K	50
120	C-GMA-120-N	100	C-GMB-120-K	50
125	C-GMA-125-N	100	C-GMB-125-K	50
150	C-GMA-150-N	100	C-GMB-150-K	50
185	C-GMA-185-N	100	C-GMB-185-K	50
240	C-GMA-240-G	25	C-GMB-240-K	50
320	C-GMA-320-G	25	C-GMB-320-K	50
Sheets	Part Number		Part Number	
203x254	S-GMA-2025-N	100	S-GMB-2025-N	100
580x580	S-GMA-5858-N	100	S-GMB-5858-N	100

Size in mm	Grade			
	GMC		GMD	
	Part Number	Packaging	Part Number	Packaging
Circles				
21	C-GMC-021-N	100	C-GMD-021-K	50
24	C-GMC-024-N	100	C-GMD-024-K	50
25	C-GMC-025-N	100	C-GMD-025-K	50
27	C-GMC-027-N	100	C-GMD-027-K	50
28	C-GMC-028-N	100	C-GMD-028-K	50
30	C-GMC-030-N	100	C-GMD-030-K	50
32	C-GMC-032-N	100	C-GMD-032-K	50
35	C-GMC-035-N	100	C-GMD-035-K	50
37	C-GMC-037-N	100	C-GMD-037-K	50
42.5	C-GMC-042-5-N	100	C-GMD-042-5-K	50
45	C-GMC-045-N	100	C-GMD-045-K	50
47	C-GMC-047-N	100	C-GMD-047-K	50
50	C-GMC-050-N	100	C-GMD-050-K	50
52	C-GMC-052-N	100	C-GMD-052-K	50
55	C-GMC-055-N	100	C-GMD-055-K	50
70	C-GMC-070-N	100	C-GMD-070-K	50
82	C-GMC-082-N	100	C-GMD-082-K	50
85	C-GMC-085-N	100	C-GMD-085-K	50
90	C-GMC-090-N	100	C-GMD-090-K	50
100	C-GMC-100-N	100	C-GMD-100-K	50
105	C-GMC-105-N	100	C-GMD-105-K	50
110	C-GMC-110-N	100	C-GMD-110-K	50
120	C-GMC-120-N	100	C-GMD-120-K	50
125	C-GMC-125-N	100	C-GMD-125-K	50
150	C-GMC-150-N	100	C-GMD-150-K	50



Part Numbers				
	Grade			
	GMC		GMD	
Size in mm	Part Number	Packaging	Part Number	Packaging
Circles				
185	C-GMC-185-N	100	C-GMD-185-K	50
240	C-GMC-240-N	100	C-GMD-240-K	50
320	C-GMC-320-N	100	C-GMD-320-K	50
Sheets	Part Number		Part Number	
203x254	S-GMC-2025-N	100	S-GMD-2025-N	100
580x580	S-GMC-5858-N	100	S-GMD-5858-N	100

	Grade			
	GMF		GMG	
Size in mm	Part Number	Packaging	Part Number	Packaging
Circles				
21	C-GMF-021-N	100	C-GMG-021-N	100
24	C-GMF-024-N	100	C-GMG-024-N	100
25	C-GMF-025-N	100	C-GMG-025-N	100
27	C-GMF-027-N	100	C-GMG-027-N	100
28	C-GMF-028-N	100	C-GMG-028-N	100
30	C-GMF-030-N	100	C-GMG-030-N	100
32	C-GMF-032-N	100	C-GMG-032-N	100
35	C-GMF-035-N	100	C-GMG-035-N	100
37	C-GMF-037-N	100	C-GMG-037-N	100
42.5	C-GMF-042-5-N	100	C-GMG-042-5-N	100
45	C-GMF-045-N	100	C-GMG-045-N	100
47	C-GMF-047-N	100	C-GMG-047-N	100
50	C-GMF-050-N	100	C-GMG-050-N	100
52	C-GMF-052-N	100	C-GMG-052-N	100
55	C-GMF-055-N	100	C-GMG-055-N	100
70	C-GMF-070-N	100	C-GMG-070-N	100
82	C-GMF-082-N	100	C-GMG-082-N	100
85	C-GMF-085-N	100	C-GMG-085-N	100
90	C-GMF-090-N	100	C-GMG-090-N	100
100	C-GMF-0100-N	100	C-GMG-100-N	100
105	C-GMF-0105-N	100	C-GMG-105-N	100
110	C-GMF-0110-N	100	C-GMG-110-N	100
120	C-GMF-120-N	100	C-GMG-120-N	100
125	C-GMF-125-N	100	C-GMG-125-N	100
150	C-GMF-150-N	100	C-GMG-150-N	100
185	C-GMF-185-N	100	C-GMG-185-N	100
240	C-GMF-240-N	100	C-GMG-240-N	100
320	C-GMF-320-N	100	C-GMG-320-N	100
Sheets	Part Number		Part Number	
203x254	S-GMF-2025-N	100	S-GMG-2025-N	100
580x580	S-GMF-5858-N	100	S-GMG-5858-N	100

Industrial Filter Papers



Filter papers are not only being used in quality control laboratories but also in various production processes in many industry sectors, including but not limited to food and beverage, chemicals, metal working and galvanics.

Many applications are connected to filter presses where the filter papers serve as protective covers for the filter cloth.

Our range of industrial filter papers includes filter media with different surface structures, variations in thickness and basis weight and a selection of different pore sizes depending on the requirements of the filtration process. K&R Filter can supply these filter papers as sheets, rolls, circles, folded filters and other custom-made sizes.

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Filter Boards

Filter boards are depth filters with an extremely thick fibre matrix. They are being used primarily in the chemical industry for the filtration of dye stuffs, lacquers and galvanic baths.

K&R Filter supplies these filter boards as discs and sheets with or without holes for use in filter press systems.



Industrial application/properties	
352	Plain industrial board with 25-30 % content of activated carbon for filtration of galvanic baths (Lead, Cadmium, Ferrum, Copper, Bright nickel bath, Regeneration of galvanic baths) and clarification of colored liquids
353	Thin, plain board for filtration of large amounts of liquids with fine-flaked precipitates (i.e. hair tonic, spirits, etc.)
354	Plain industrial filter board for galvanic baths (Mangenes, Nickel, Bright nickel bath, Zinc, Ferrum) and transformer oils
316	Plain industrial board for filter press applications
357	Plain industrial board for technical oils, transformer oils and galvanic baths
304	Plain industrial board for oils, lacquers, transformer oil, engine and turbine oils, galvanic baths (Ferrum, Copper, Nickel, Silver)
358	Plain industrial board for galvanic baths and transformer oils
319	Plain industrial board for galvanic baths, process water filtration and activated carbon retention
361	Plain industrial board for galvanic baths (Bright Copper bath, Bright Nickel bath, Ferrum, Silver), filter press applications, edible oils and essential oils
305	Plain industrial board for galvanic baths (Bright Copper bath, Bright Nickel bath, Zinc, Silver, Lead), fine turbidities, edible oils and essential oils

Technical Data				
Grade	Basis weight in g/m ²	Retention in micron N.	Pressure Drop in mm wc	Thickness in micron
353	151	4.0	210	340

Grade	Max Pore Size in micron	Burst Strength in kPa	Wet Burst Strength in kPa
353	32	285	82



Industrial Filter Papers

Technical Data

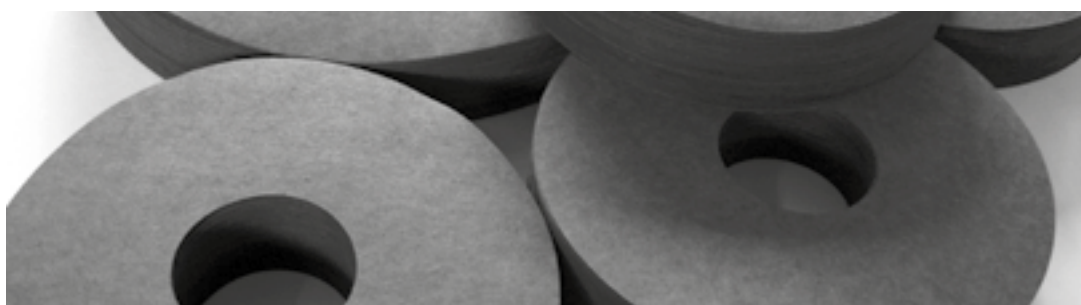
Grade	Basis weight in g/m ²	Retention in micron N.	Air Resistance in mm wc	Thickness in micron
352	160	/	190	372.5
354	250	5	170	580
316	275	3	190	580
357	345	10	290	770
304	370	8	130	950
358	450	12	325	1000
319	550	8	325	1270

Grade	Max Pore Pressure in mm wc	Burst Strength in kPa	Wet Burst Strength in kPa	Content Activated Carbon in %
352	300	> 150	> 60	27.5
354	290	> 130	> 60	/
316	300	> 160	> 75	/
357	330	> 200	> 70	/
304	220	> 200	> 60	/
358	300	> 250	> 90	/
319	330	> 250	> 90	/

Grade	Basis weight in g/m ²	Thickness in mm	Permeability in L/min m ²	Micron Rating in micron N.
361	670 +/- 20	1.65 +/- 0.1	1000	12.5
305	730 +/- 30	1.55 +/- 0.1	900	9.0

Part Numbers

Grade	Part No.	Size in mm	Packaging
304	S-304-5858-N	580x580	100
316	S-316-5858-N	580x580	100
319	S-319-5858-N	580x580	100
353	S-353-5858-N	580x580	100
354	S-354-5858-N	580x580	100
357	S-357-5858-N	580x580	100
358	S-358-5858-N	580x580	100
361	S-361-5858-N	580x580	100
305	S-305-5858-N	580x580	100



Creped Filter Papers

Naturally, due to their wet-laid production process, filter papers have a smooth or plain surface. These plain filter papers are designed to meet specific filtration requirements. For some applications, especially when facing a high dirt load, it is recommendable to use a filter paper with enlarged filtration area such as creped filter papers. The benefits of such creped filter papers are quite evident: due to their higher dirt loading capacity, these papers offer a longer service life and a more efficient clarification of the filtrate.

Increased elasticity of the creped surface results in a higher mechanical strength which is important in many process filtration procedures.

Industrial application/properties	
336	Thin, creped industrial paper when strong contamination is given as protective paper for filter presses and galvanic baths (Lead, Ferrum, Gold, Iridium, Copper, Nickel, Silver, Zinc)
337	Thick, creped industrial paper for filtration of lacquers, dye emulsions, gelatine, fruit juices, transformer oils and galvanic baths (Zinc, Nickel, Copper)
338	Thick, creped industrial paper for filtration of contaminated industrial liquids, lacquers and dye stuff, chip pan filters and galvanic baths (Copper, Nickel, Zinc)
341	Thin, creped industrial paper for filtration of edible oils, as protection of filter presses and applications in sugar industry
345	Thick, creped industrial paper for filtration of technical oils, edible oils, technical greases and as pre-filter for transformer oils
348-351	Thin, creped industrial paper available in different grammages (60, 70, 80, 90 g/m ²) for filtration of juices, edible oils, colloidal liquids, for wine and hair tonics and for galvanic baths (Cadmium, Iridium, bright nickel bath, Silver and Zinc/Nickel alloys)
360	Thick, creped industrial paper for filtration of edible oils, essential oils, transformer oils, filter press applications

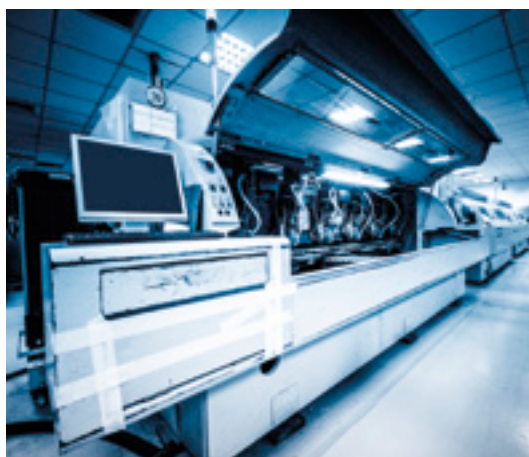
Technical Data				
Thin Creped Papers				
Grade	Basis weight in g/m ²	Thickness in µm	Wet Burst Strength MD in N	Filtration Velocity in sec
336	60	200	≥ 4.5	-1.0 / +4.0
341	75	250	≥ 6.5	/
348	60	200	≥ 6.5	15
349	70	230	≥ 6.5	15
350	80	330	≥ 7.5	14
351	90	360	≥ 7.5	13
Thick Creped Papers				
Grade	Basis weight in g/m ²	Thickness in micron	Wet Burst Strength in kPa	Air Resistance in mm wc
337	140	670	> 70	100
338	185	850	> 40	125
345	140	670	> 70	100
360	110	600	> 65	215
Grade	Retention in micron N.	Max Pore Pressure in mm wc	Burst Strength in kPa	
337	13	170	> 160	
338	10	185	> 150	
345	13	170	> 160	
360	8	220	> 150	



Industrial Filter Papers

Part Numbers

Grade	Part No.	Size in mm	Packaging
336	S-336-5858-N	580x580	100
337	S-337-5858-N	580x580	100
338	S-338-5858-N	580x580	100
341	S-341-5858-N	580x580	100
345	S-345-5858-N	580x580	100
348	S-348-5858-N	580x580	100
349	S-349-5858-N	580x580	100
350	S-350-5858-N	580x580	100
351	S-351-5858-N	580x580	100
360	S-360-5858-N	580x580	100



Nonwovens for Belt Filters

K&R Filter offers a range of rayon-made nonwoven filter media used in belt filters. Belt filters are a kind of continuous filters that usually separate particulate matter from liquids or gases. One of the main application is in the metal processing industry where cooling liquid is contaminated with metal parts during grinding, drilling, honing or other metal working tasks.

Our nonwoven filter media come in different basis weights, thicknesses and pore sizes and fulfil the requirements of all existing filter units on the market.

Industrial application/properties

Applications nonwoven filter paper:

Hardening, galvanizing, wire cutting, turning, lapping, profile grinding, washing, cleaning, oil recovery, oil recycling, milling, hot and cold rolling, honing, internal grinding, external grinding, final grinding, drilling

Suitable filtration processes with nonwoven filter paper:

Emulsions, grinding oils, honing oils, cutting oils, rolling oils, petroleum washing solutions, synthetic solutions

Technical Data

Rayon (viscose)			
Grade	323	325	327
Basis weight in g/m ²	30 +/- 4	42 +/- 6	65 +/- 7
Thickness in micron	220 +/- 65	270 +/- 70	450 +/- 130
Tensile strength M.D. in N/5 cm	> 60	> 70	> 100
Tensile strength C.D. in N/5 cm	> 8	> 9	> 16
Wet tensile strength M.D. in N/5 cm	> 25	> 30	> 40
Wet tensile strength C.D. in N/5 cm	> 5	> 6	> 8
Air permeability in L/m ² sec	4440	3620	3910

Grade	324	326
Basis weight in g/m ²	35 +/- 10 %	50 +/- 10 %
Thickness in mm	0.19 +/- 15 %	0.35 +/- 15 %
Max. tensile strength dry in N/5 cm LD/TD	65/12 +/- 10 %	90/20 +/- 10 %
Max. tensile strength wet in N/5 cm LD/TD	28/5 +/- 10 %	40/8 +/- 10 %
Max. elongation dry in % LD/TD	10/14 +/- 20 %	13/14 +/- 20 %
Max. elongation wet in % LD/TD	20/35 +/- 20 %	18/31 +/- 20 %
Air permeability in l/(m ² sec)	4420 +/- 25 %	3440 +/- 25 %
Retention Size in Micron	170	130

Part Numbers

Grade	Part No.	Roll Size	Packaging
323	R-323-4225-Z	420 mm x 250 m	1
323	R-323-4965-Z	490 mm x 320 m	1
323	R-323-7025-Z	700 mm x 250 m	1
323	R-323-7140-Z	710 mm x 400 m	1
323	R-323-1025-Z	1015 mm x 250 m	1
323	R-323-1055-Z	1015 mm x 550 m	1
	R-323-1555-Z	1500 mm x 550 m	

Grade	Part No.	Roll Size	Packaging
324	R-324-4225-Z	420 mm x 250 m	1
324	R-324-4965-Z	490 mm x 320 m	1
324	R-324-7025-Z	700 mm x 250 m	1
324	R-324-7140-Z	710 mm x 400 m	1
324	R-324-1025-Z	1015 mm x 250 m	1
324	R-324-1055-Z	1015 mm x 550 m	1
324	R-324-1555-Z	1500 mm x 550 m	1

Grade	Part No.	Roll Size	Packaging
325	R-325-4225-Z	420 mm x 250 m	1
325	R-325-4965-Z	490 mm x 320 m	1
325	R-325-7025-Z	700 m x 250 m	1
325	R-325-7140-Z	710 mm x 400 m	1
325	R-325-1025-Z	1015 mm x 250 m	1



Industrial Filter Papers

Part Numbers

Grade	Part No.	Roll Size	Packaging
325	R-325-1055-Z	1015 mm x 550 m	1
325	R-325-1555-Z	1500 mm x 550 m	1

Grade	Part No.	Roll Size	Packaging
326	R-326-4225-Z	420 mm x 250 m	1
326	R-326-4965-Z	490 mm x 320 m	1
326	R-326-7025-Z	700 mm x 250 m	1
326	R-326-7140-Z	710 mm x 400 m	1
326	R-326-1025-Z	1015 mm x 250 m	1
326	R-326-1055-Z	1015 mm x 550 m	1
326	R-326-1555-Z	1500 mm x 550 m	1

Grade	Part No.	Roll Size	Packaging
327	R-327-4225-Z	420 mm x 250 m	1
327	R-327-4965-Z	490 mm x 320 m	1
327	R-327-7025-Z	700 mm x 250 m	1
327	R-327-7140-Z	710 mm x 400 m	1
327	R-327-1025-Z	1015 mm x 250 m	1
327	R-327-1055-Z	1015 mm x 550 m	1
327	R-327-1555-Z	1500 mm x 550 m	1





For many medical and clinical applications, paper is the ideal basic material.

K&R Filter offers a filter paper which serves as collection and storage vessel for blood and other human body liquids prior to their analysis.

Furthermore, our product range comprises hydrophobic, yet steam-permeable, papers for the packing of surgical instruments, doctors' garments and other objects for sterilization. These papers help maintain the sterility until use. Other highlights of our medical products range are covers and protection papers as well as cyto-strips for cytocentrifuges.

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Medical Products

NNS - Specimen Collection Cards

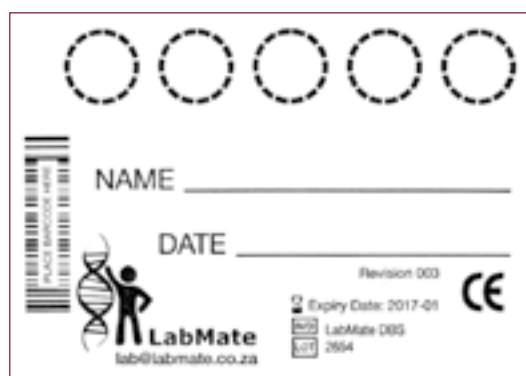
A special grade of filter paper is needed for the collection of blood samples for neonatal screening. After the baby's blood sample has been applied onto the collection card, it is sent to a laboratory where it is checked for possible metabolic disorders. Our filter paper grade NNS is particularly suitable for this procedure as it preserves the cells needed for blood analysis within the fibre matrix.

Grade NNS is a filter paper produced from 100% pure cotton linters and does not contain any chemical additives that would be detrimental to the condition of the sample collected. Our product is also subject to a very stringent quality control as far as basis weight, thickness and absorbency are concerned in order to ensure the highest possible consistency in performance.

K&R Filter offers the NNS product either in form of larger sheets in standard size 580 x 580 mm or as customized test cards according to the layout provided by the customer with print on either one or both sides. It is also possible to attach multi-part forms to the test cards or print consecutive numbers or a bar code for better identification.

Besides neonatal screening, our NNS Specimen Collection Cards can be used for the following applications:

- Paternity Tests
- HIV Tests
- Urine Tests
- Forensic Applications



Part Number			
Grade	Part No.	Size in mm	Packaging
NNS, 180 g/m ²	S-NNS-5858-N	580 x 580	100

Other Medical Products

Sterilization Wrapping Paper

Our sterilization wrapping paper grade No. 333 is a special product that is used for wrapping surgical objects prior to autoclaving. Due to its water-repellent nature it helps keep the sterility of the wrapped goods until their final use.

Grade No. 333 is available in white, green and blue colour and can be supplied in form of rolls and sheets in standardized sizes. It is also used as a cover for dental trays.

Properties/Application

Grade 333 is, within the meaning of the Medical Device Directive 93/42/EEC classified as sterilization packing. It is produced in accordance with DIN EN 868-2:2009 and DIN EN ISO 11607-1(2009-09), under the regular supervision of an international testing institute to guarantee the highest, consistent quality. Grade 333 is available in three different colors (green, blue, white). It is a creped paper 58 g/m², hydrophobic and applied when drying ovens up to 180 °C or for autoclaves, steam sterilization, gas and gamma sterilization.

			Part Numbers
Grade	Size in cm/Description	Packaging	Part Numbers
333W	100x100 White 58g	250	S-333W-1010-T
333W	120x120 White 58g	125	S-333W-1212-O
333W	45x45 White 58g	500	S-333W-4545-Q
333W	50x50 White 58g	500	S-333W-5050-Q
333W	60x60 White 58g	500	S-333W-6060-Q
333W	75x75 White 58g	250	S-333W-7575-T
333B	100x100 Blue 58g	250	S-333B-1010-T
333B	120x120 Blue 58g	125	S-333B-1212-O
333B	45x45 Blue 58g	500	S-333B-4545-Q
333B	50x50 Blue 58g	500	S-333B-5050-Q
333B	60x60 Blue 58g	500	S-333B-6060-Q
333B	75x75 Blue 58g	250	S-333B-7575-T
333B	90x90 Blue 58g	250	S-333B-9090-T
333G	100x100 Green 58g	250	S-333G-1010-T
333G	120x120 Green 58g	125	S-333G-1212-O
333G	50x50 Green 58g	500	S-333G-5050-Q
333G	60x60 Green 58g	500	S-333G-6060-Q
333G	75x75 Green 58g	250	S-333G-7575-T
333G	90x90 Green 58g	250	S-333G-9090-T



Covers and Protection Papers

For hygienic reasons, examination chairs and stretchers need to be covered by a piece of paper. Our grade No. 318 is highly absorbent and at the same time burst and tear resistant. It is available in form of rolls and sheets. Order information is available upon request.

			Part Numbers
Grade	Part No.	Size in mm	Packaging
318	S-318-1418-T	135 x 175	250
318	S-318-1828-T	180 x 280	250
318	S-318-2836-T	280 x 360	250





Medical Products

Strips for Cytocentrifugation

Cytocentrifuges can be used to transfer any sedimentable particles from liquid suspension onto a microscope slide, but is primarily used to transfer biological cells. The principle of all cytocentrifugation techniques is that the cell is denser than the suspending fluid and under an applied force the cell will have greater momentum than the fluid. The cellular movement occurs after passing through the sample chamber. The cells are projected towards the microscope slide with sufficient momentum to cross the exit port formed by placing a filter card between the chamber sample and the glass slide resulting in cell to slide adhesion.

K&R Filter offers filter cards for all commercially available cytocentrifuges. More information is available upon request.

Part Number			
Grade	Part No.	Size in mm	Packaging
358, 450 g/m ²	S-358-5858-N	580 x 580	100





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Technical Information

Grade Comparison Chart

K&R Filter	Ahlstrom	Munktell	Macherey & Nagel	Whatman
100	54/55	388	640w	54
101	/	389	640m	41
102	74	390	640d	40
103	95	391	640de	44
105	94	393	640de	42
106	238	BF2	218B	3MMChr
107	/	BF3	727B	182
108	/	BF4	866B	/
112	/	FN7	/	/
114	243	FN30	/	17CHR
118	/	27CH	/	/
200	601	292	616	1
201	642	292a	616md	2
203	631	1288	1670	4
204	/	1289	1672	/
205	/	1292	/	/
206	950	1290	619eh	6
207	/	1291	1674	/
208	/	/	/	/
210	601	3hw	615	Student grade
213	/	3w	/	/
214	613	4b	/	93
215	/	6	514	114
218	/	1765	/	181
219	/	1766	/	/
220	Extraction Thimbles	ET/C	645	Thimbles/2800
301	/	49	/	/
304	601ws	152	/	/
305	/	157	/	/
316	/	358	/	/
317	Polyshield 4002	LabSorb	210PE LabTop	Benchcote
319	/	511	/	/
323	/	2601, 30g/m ²	/	/
324	/	2601, 35g/m ²	/	/
325	/	2601, 40g/m ²	/	/
326	/	2601, 50g/m ²	/	/
327	/	2601, 60g/m ²	/	/
333	/	363	/	/
336	/	34/N, 60g/m ²	/	/
337	/	37/N	/	/
338	620ws	39/N, 180g/m ²	/	/
341	615	55/N	/	91
345	/	6S/N	/	113
346	/	601/N	/	91

Grade Comparison Chart

K&R Filter	Ahlstrom	Munktell	Macherey & Nagel	Whatman
347	/	603/N	/	/
348	/	67/N, 60g/m ²	/	/
349	/	67/N, 70g/m ²	/	/
350	/	67/N, 80g/m ²	/	/
351	609ws	67/N, 90g/m ²	/	/
352	AC-160	69/K	/	/
353	/	C 160	/	/
354	C-250	C 250	/	/
357	C-350	C 350	/	/
358	C-450	C 450	/	/
360	609ws/a	/	/	/
GMA	111	MGA	GF1	GFA
GMB	121	MGB	GF2	GFB
GMC	131	MGC	GF3	GFC
GMD	141	MGD	GF4	GFD
GMF	151	MGF	GF5	GFF
GMG	/	MGG	/	/
405	/	ET/MG160	649	603 G
QMS	/	T293	/	/
NNS	226	TFN	818GT	903





Technical Information

Chemical Compatibility- Filter Materials

	Cellulose Acetate	Cellulose Nitrate	Reg. Cellulose/Cellulose Papers	PTFE	Polyamide	Glass Fiber	Polycarbonate	Polyether Sulfone
Solvents								
Acetone	-	-	■	■	-	■	□	-
Acetonitrile	?	?	■	■	-	?	?	■
Benzene	■	■	■	■	■	■	?	■
Benzyl alcohol	□	□	■	■	■	■	?	-
n-Butyl acetate	□	-	■	■	■	■	■	■
n-Butanol	■	■	■	■	■	■	■	■
Carbon tetrachloride	□	■	■	■	■	■	?	■
Cellosolve	■	-	■	■	?	■	-	■
Chloroform	-	■	■	■	■	■	-	-
Cyclohexane	□	□	■	■	?	■	■	-
Cyclohexanone	-	-	■	■	■	■	?	?
Diethylacetamide	-	-	■	■	■	■	?	?
Diethyl ether	■	-	■	■	■	■	■	?
Dimethyl formamide	-	-	□	■	□	■	-	?
Dimethylsulfoxide	-	-	■	■	■	■	-	-
Dioxane	-	-	■	■	■	■	-	■
Ethanol, 98%	■	□	■	■	■	■	■	■
Ethyl acetate	-	-	■	■	■	■	?	-
Ethylen glycol	■	□	■	■	?	■	■	■
Formadime	?	?	?	■	?	■	-	?
Gasoline	■	■	■	■	■	■	■	■
Glycerine	■	■	■	■	■	■	■	■
n-Heptane	■	■	■	■	?	■	?	?
n-Hexane	■	■	■	■	■	■	■	?
Isobutanol	□	□	■	■	■	■	■	?
Isopropanol	■	□	■	■	■	■	■	
Isopropyl acetate	□	-	■	■	?	■	?	■
Methanol, 98%	■	-	■	■	?	■	■	■
Methyl acetate	-	-	■	■	■	■	?	-
Methylene chloride	-	□	■	■	■	■	-	-
Methyl ethyl ketone	-	-	■	■	■	■	?	-
Methyl isobutyl ketone	■	-	■	■	■	■	?	?
Monochlorobenzene	■	■	■	■	■	■	-	?
Nitrobenzene	■	□	■	■	■	■	-	?
n-Pentane	■	■	■	■	■	■	■	?
Perchloroethylene	■	■	■	■	■	■	■	?
Pyridine	-	-	■	■	■	■	-	-
Tetrahydrofuran	-	-	■	■	■	■	-	-
Toluene	■	■	■	■	■	■	?	■
Trichlorethane	□	■	■	■	?	■	?	?

Chemical Compatibility- Filter Materials

	Cellulose Acetate	Cellulose Nitrate	Reg. Cellulose/Cellulose Papers	PTFE	Polyamide	Glass Fiber	Polycarbonate	Polyether Sulfone
Trichloroethylene	■	■	■	■	■	■	-	■
Xylene	■	■	■	■	■	■	■	■
Acids								
Acetic acid, 25%	■	■	■	■	□	?	□	■
Acetic acid, 96%	-	-	■	■	-	?	?	■
Hydrochloric acid, 25%	-	□	-	■	-	?	■	■
Hydrochloric acid, 37%	-	-	-	■	-	?	■	■
Hydrofluoric acid, 25%	■	□	□	■	-	?	■	?
Hydrofluoric acid, 50%	■	□	-	■	-	?	■	?
Nitric acid, 25%	-	□	-	■	-	?	■	■
Nitric acid, 65%	-	-	-	■	-	?	■	■
Perchloric acid, 25%	-	□	□	■	-	?	?	?
Phosphoric acid, 25%	■	□	□	■	-	?	?	?
Phosphoric acid, 85%	□	□	□	■	-	?	-	?
Sulphuric acid, 25%	-	□	□	■	-	■	?	■
Sulphuric acid, 98%	-	-	-	■	-	?	-	?
Trichloroacetic acid, 25%	-	□	■	■	-	?	?	?
Bases								
Ammonium, 1N	■	■	□	■	■	■	-	■
Ammoniumhydroxide, 25%	-	□	-	γ	■	□	-	■
Potassium hydroxide, 32%	-	-	□	■	□	□	-	■
Sodium hydroxide, 32%	-	-	□	■	□	□	-	■
Sodium, 1N	□	-	□	■	■	■	-	■
Aqueous Solutions								
Formalin, 30%	□	■	□	■	□	■	■	■
Hydrogen peroxide, 35%	■	■	□	■	□	?	?	?
Sodium hypochlorite, 5%	■	□	■	■	□	■	?	?





Technical Information

Chemical Compatibility- Syringe Filters

	PTFE Ven- ting Unit 64 mm	Cellulose Acetate	Venting Unit 26mm	Reg. Cellulose/ Cellulose Papers	PTFE	PVDF
Solvents						
Acetone	■	-	-	■	-	□
Acetonitrile	■	-	?	■	■	□
Benzene	■	-	-	?	■	■
Benzyl alcohol	■	?	?	?	■	□
n-Butyl acetate	□	-	-	?	■	?
n-Butanol	■	□	□	■	■	□
Carbon tetrachloride	■	□	□	?	■	?
Cellosolve	□	-	-	■	□	?
Chloroform	■	-	-	■	■	■
Cyclohexane	■	-	-	?	■	-
Cyclohexanone	■	-	-	?	■	-
Diethylacetamide	■	-	-	■	■	□
Diethyl ether	■	?	?	?	■	□
Dimethyl formamide	■	-	-	?	■	-
Dimethylsulfoxide	■	-	-	■	■	□
Dioxane	■	-	-	■	■	■
Ethanol, 98%	■	-	-	■	■	□
Ethyl acetate	■	□	□	■	■	■
Ethylen glycol	■	?	?	■	■	?
Formadime	■	?	?	?	■	■
Gasoline	■	■	■	■	■	-
Glycerine	■	■	■	?	■	?
n-Heptane	■	■	■	?	■	?
n-Hexane	■	■	■	■	■	?
Isobutanol	■	□	□	■	■	■
Isopropanol	■	□	□	-	■	?
Isopropyl acetate	■	□	□	?	■	■
Methanol, 98%	■	-	-	■	■	?
Methyl acetate	■	-	-	?	■	?
Methylene chloride	■	-	-	■	■	-
Methyl ethyl ketone	■	-	-	■	■	-
Methyl isobutyl ketone	■	?	?	?	■	?
Monochlorobenzene	■	?	?	?	■	?
Nitrobenzene	■	?	?	?	■	?
n-Pentane	■	■	■	■	■	?
Perchloroethylene	■	□	□	?	?	■
Pyridine	■	-	-	?	■	■
Tetrahydrofuran	■	-	■	■	■	■
Toluene	■	-	■	■	■	■
Trichlorethane	■	□	□	■	■	?

Chemical Compatibility- Syringe Filters

	PTFE Venting Unit 64 mm	Cellulose Acetate	Venting Unit 26mm	Reg. Cellulose/Cellulose Papers	PTFE	PVDF
Trichloroethylene	✗	?	?	?	□	?
Xylene	■	-	-	■	■	□
Acids						
Acetic acid, 25%	■	□	□	?	?	■
Acetic acid, 96%	■	-	-	?	■	■
Hydrochloric acid, 25%	■	-	-	?	■	?
Hydrochloric acid, 37%	■	-	-	?	■	■
Hydrofluoric acid, 25%	■	□	□	?	■	?
Hydrofluoric acid, 50%	■	□	□	?	■	?
Nitric acid, 25%	■	-	-	?	■	-
Nitric acid, 65%	■	-	-	?	■	-
Perchloric acid, 25%	■	?	?	?	■	?
Phosphoric acid, 25%	■	■		?	■	?
Phosphoric acid, 85%	-	?	?	?	■	?
Sulphuric acid, 25%	■	-	-	?	■	■
Sulphuric acid, 98%	■	-	-	?	■	-
Trichloroacetic acid, 25%	■	-	-	■	■	-
Bases						
Ammonium, 1N	■	■	■	?	■	■
Ammoniumhydroxide, 25%	■	□	□	?	■	■
Potassium hydroxide, 32%	■	-	-		■	?
Sodium hydroxide, 32%	■	-	-	?	■	□
Sodium, 1N						
Aqueous Solutions						
Formalin, 30%	■	-	-	?	■	-
Hydrogen peroxide, 35%	■	■	■	?	■	-
Sodium hypochlorite, 5%	■	■	■	?	■	?





Product Register

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