Filter papers for special applications

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Sterilizing paper	MN 68 on r	equest
Electrocardiographs, contact paper	on r	equest
Nitrogen-free paper	MN 321 on r	equest
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Activated charcoal filter paper

The activated charcoal filter paper MN 728 is particularly suited for the clarification and decoloring of solutions. The activated charcoal is incorporated in the paper and cannot be washed out into the filtrate.

Technical data

Grade	Thickness	Filtration speed	Basis weight
MN 728	0.4 mm	55 s	170 g/m²

Ordering information

References for packs of 100 filters

Ø	MN 728	Ø	MN 728
55 mm	48 10 05	150 mm	48 10 15
70 mm	48 10 07	185 mm	48 10 18
90 mm	48 10 09	240 mm	48 10 24
110 mm	48 10 11	320 mm	48 10 32
125 mm	48 10 12		

other sizes and cuts on request



Soil analysis, phosphate-free filters

MN 280 1/4: folded filters made from acid-washed paper with a high clarification efficiency for determination of micro-nutrients available to vegetation

MN 619 G, phosphate-free: slow filtration, phosphate-free filter paper for soil analysis

MN 616 G, phosphate-free: medium fast filtration, phosphate-free filter paper

MN 617 G, phosphate-free: fast filtration, phosphate-free filter paper

Technical data

Grade	Properties	Thickness	Filtration speed	Basis weight
MN 280 1/4	smooth	0.18 mm	95 s	75 g/m ²
MN 619 G	smooth	0.17 mm	100 s	75 g/m ²
MN 616 G	smooth	0.20 mm	22 s	85 g/m ²
MN 617 G	smooth	0.20 mm	9 s	85 g/m ²



Ordering information

References for packs of 100 filters

Ø	MN 280 1/4	MN 6	519 G	MN 616 G	MN 617 G
55 mm	-	44 00 05	54 00 05	48 30 05	49 40 05
70 mm	-	44 00 07	54 00 07	48 30 07	49 40 07
90 mm	-	44 00 09	54 00 09	48 30 09	49 40 09
110 mm	52 10 11	44 00 11	54 00 11	48 30 11	49 40 11
125 mm	52 10 12	44 00 12	54 00 12	48 30 12	49 40 12
150 mm	52 10 15	44 00 15	54 00 15	48 30 15	49 40 15
185 mm	52 10 18	44 00 18	54 00 18	48 30 18	49 40 18
240 mm	52 10 24	44 00 24	54 00 24	48 30 24	49 40 24
320 mm	-	44 00 32	54 00 32	48 30 32	49 40 32

other sizes and cuts on request

Polyester paper

This filters made from 100% polyester fibres features a very high mechanical strength in dry as well as in wet condition.

Technical data

Grade	Properties	Thickness	Basis weight
MN 52 K	hydrophobic polyester paper	0.17 mm	100 g/m ²

Available sizes and ordering information on request



Filter papers for breweries

The filter paper grade MN 620 can be used to efficiently decarbonate beer. MN 614 and the nitrogen-free MN 321 are used for malt analysis.

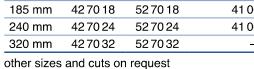
Technical data

Grade	Properties	Thick- ness	Filtration speed	Basis weight
MN 614	medium speed, embossed filter paper	0.25 mm	25 s	75 g/m ²
MN 321	fast filtration, nitrogen free	0.23 mm	5 s	85 g/m ²
MN 620	medium speed, embossed filter paper made from unbleached pulp	0.26 mm	25 s	75 g/m²

Ordering information

References for packs of 100 filters

Ø	MN	614	MN 321	MN	620
55 mm	42 70 05	52 70 05	41 00 05	_	-
70 mm	42 70 07	52 70 07	41 00 07	_	-
90 mm	42 70 09	52 70 09	41 00 09	44 10 09	54 10 09
110 mm	42 70 11	52 70 11	41 00 11	44 10 11	54 10 11
125 mm	427012	52 70 12	41 00 12	44 10 12	54 10 12
150 mm	42 70 15	52 70 15	41 00 15	44 10 15	54 10 15
185 mm	427018	52 70 18	41 00 18	44 10 18	54 10 18
240 mm	42 70 24	52 70 24	41 00 24	44 10 24	54 10 24
320 mm	427032	52 70 32	_	44 10 32	54 10 32





Fat analysis

MN 615 ff: This paper is particularly suited for the analysis of fats. A special treatment with organic solvents guarantees that these filters are practically free of fats and resins (ethersoluble residue < 0.1 mg for a 27 cm filter circle).

MN 715: This paper is also suited for the analysis of fats. Careful selection of the raw materials ensures a low ether-soluble residue for these filters.

Technical data

Grade	Properties	Thick- ness	Filtration speed	Basis weight
MN 615 ff	smooth, washed with organic solvents	0.16 mm	22 s	70 g/m ²
MN 715	smooth	0.16 mm	22 s	70 g/m ²

Ordering information

References for packs of 100 filters

Ø	MN 615 ff	MN 715
55 mm	59 10 05	52 80 05
70 mm	59 10 07	528007
90 mm	59 10 09	52 80 09
110 mm	59 10 11	52 80 11
125 mm	59 10 12	52 80 12
150 mm	59 10 15	52 80 15
185 mm	59 10 18	52 80 18
240 mm	59 10 24	52 80 24
270 mm	59 10 27	52 80 27
320 mm	- -	52 80 32

other sizes and cuts on request

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Kieselguhr paper MN 660

This filter paper retains very fine turbidities and is e.g. recommended for the clarification of urines or sugar solutions.

Technical data

Grade	Thickness	Basis weight
MN 660	0.32 mm	140 g/m²

Ordering information

References for packs of 100 filters

Ø	MN 660		
90 mm	44 70 09	_	
110 mm	44 70 11	54 70 11	
125 mm	44 70 12	54 70 12	
150 mm	44 70 15	54 70 15	
185 mm	44 70 18	54 70 18	
240 mm	44 70 24	54 70 24	
320 mm	44 70 32	54 70 32	

other sizes and cuts on request

Black filter paper for the detection of light precipitates

This filter paper, which is dyed black with a sulfur dye, is used to identify small quantities of light precipitates. For example, it is used for the detection of fluorine or silicon.

Technical data

Grade	Thickness	Filtration speed	Basis weight
MN 220	0.17 mm	45 s	85 g/m²

Ordering information

References for packs of 100 filters

Ø	MN 220	
55 mm	40 90 05	
70 mm	40 90 07	
90 mm	40 90 09	
110 mm	40 90 11	
125 mm	40 90 12	
150 mm	40 90 15	
185 mm	40 90 18	

other sizes and cuts on request

Hydrophobic phase separation papers

These papers are made hydrophobic (impermeable to water) by impregnation with a silicone. With the aid of these filters, water can be separated from water-immiscible organic solvents in an elegant manner, by means of a simple filtration.

Technical data

Grade	Properties	Thickness	Filtration speed	Basis weight
MN 617 WA	smooth	0.2 mm	fast	85 g/m ²
MN 616 WA	smooth	0.2 mm	medium fast	85 g/m ²

Ordering information

References for packs of 100 filters

Ø	MN 617 WA	MN 6	16 WA
55 mm	_	48 40 05	_
70 mm	_	48 40 07	_
90 mm	43 00 09	48 40 09	58 40 09
110 mm	43 00 11	48 40 11	58 40 11
125 mm	43 00 12	48 40 12	58 40 12
150 mm	43 00 15	48 40 15	58 40 15
185 mm	43 00 18	48 40 18	58 40 18
240 mm	43 00 24	48 40 24	52 80 24
320 mm	_	48 40 32	528032

other sizes and cuts on request



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Weighing aids

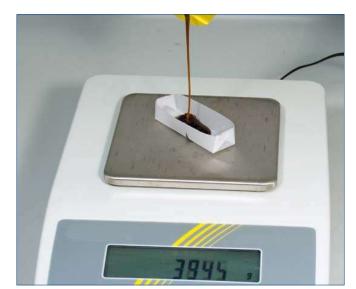
Weighing boats MN 808: Weighing boats MN 808 are made from a special, nitrogen-free parchment. They are used to weigh viscous or syrupy substances.

Weighing paper MN 226: This is a transparent paper, smooth on both sides, which can be used as substitute for weighing boats. The smooth surface of the paper guarantees that the weighed goods can be transferred without loss.

Parchment sheets MN 40/25: These easily crushable (not wet-strengthened) parchment papers are mainly used in the sugar industry for weighing syrupy and semi-crystalline substances.

Technical data

Grade	Properties	Basis weight
MN 808	weighing boats	n.a.
MN 226	transparent, smooth	40 g/m ²
MN 40/25	crushable parchment paper	25 g/m ²



Ordering information

MN 808		
Size	REF	
58 x 10 x 10 mm	100 boats	48 60 00
70 x 23 x 15 mm	100 boats	48 60 01

MN 226				
Size	Pack of	REF		
block with	1 block	18 60 02		
100 sheets				
9 x 11.5 cm				

Size	Pack of	REF
10 x 10 cm	100 sheets	19 40 00

Filtration with suction filters

These filters are used specifically with suction filters. The elevated border safely prevents sample to run past the edge of the filter. Residues won't stick to the suction filter walls. Thus, the entire filter cake can be used for further analysis quickly and easily.

Technical data

Grade	Thickness	Filtration speed	Basis weight
MN 640 w	0.2 mm	9 s	85 g/m²

Ordering information

MN 640 w		
Ø	Pack of	REF
90 mm	100	20 29 01
110 mm	100	20 29 03
125 mm	100	20 29 02



quantitative analysis

qualitative analysis

Antibiotic resistance testing

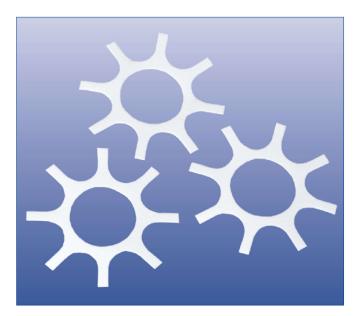
These products are used in testing the resistance of pathogens to antibiotics. For this test the filter paper sections can be impregnated with the antibiotic to be tested and placed on the inoculated nutrient medium. Depending on the effectiveness, a smaller or larger zone of inhibition is formed. MACHEREY-NAGEL only supplies non-impregnated filter paper sections!

Technical data

Grade	Thickness	Filtration speed	Basis weight
MN 827	0.7 mm	12 s	270 g/m ²

Ordering information

MN 827		
Antibiotic test section	Pack of	REF
Test disks MN 827 ATD, Ø 6 mm	1000	48 40 00
Test disks MN 827 ATD, Ø 9 mm	1000	48 40 01
Test stars MN 827 ATS/8	1000	48 40 03



Ion exchange papers

MN 616 LSA-50: Filter paper with strongly acidic cation exchange resin; matrix polystyrene crosslinked with $8.5\,\%$ DVB; active groups SO₃H, strongly acidic, supplied in H⁺ form; capacity 2.0 mval/g, applicable up to 100 °C.

A folded filter of 15 cm diameter is sufficient to demineralize 100 mL of water with a hardness of 10 °d.

MN 616 LSB-50: Filter paper with strongly basic anion exchange resin; matrix polystyrene crosslinked with 6 % DBV; active groups quaternary ammonium compounds, strongly basic; supplied in OH⁻ form; capacity 1.3 mval/g, applicable up to 70 °C.

Technical data

Grade	Properties	Basis weight
MN 616 LSA-50	contains cationic exchange resin	100 g/m²
MN 616 LSB-50	contains anionic exchange resin	100 g/m ²

Ordering information

Ø	MN 616 LSA-50	MN 616 LSB-50	
48 mm	43 21 10	43 21 20	

other sizes and cuts on request

Lens tissue paper (José paper)

Thin, soft, non-fluffing tissue paper for cleaning optical glasses, cuvettes, also suitable as protective paper for metallographic sections

Technical data

Grade	Properties	Basis weight
MN 13	very thin, smooth	13 g/m²

Ordering information

MN 13		
Presentation	Pack of	REF
Sheets, 12 x 12 cm	500 sheets	41 81 01
Sheets, 36 x 48 cm	500 sheets	41 81 02
Blocks with 50 sheets 8 x 10 cm	1 block	11 80 00

other sizes and cuts on request



Surface protection paper LAB-TOP

Filter paper coated on one side with polyethylene, e.g. for covering laboratory workbenches. The filter paper absorbs spilt liquids. It is especially suited for isotope and bacteriological laboratories as well as for chemical storerooms and cupboards.

Technical data

Grade	Properties	Thickness	Basis weight
MN 210 PE	one side PE-coated	0.22 mm	140 g/m ²

Ordering information

MN 210 PE			
Presentation	Pack of	REF	
Sheets, 48 x 60 cm	100 sheets	11 20 00	
Sheets, 48 x 60 cm	50 sheets	11 20 00.1	
Roll, 100 x 0.48 m	1 roll	11 20 10	
Roll, 50 x 0.48 m	1 roll	11 20 50	
Roll, 100 x 0.60 m	1 roll	11 20 20	
Roll, 50 x 0.60 m	1 roll	11 20 30	

other sizes and cuts on request



Filter aids

Filter flocs

Filter aids transform difficult precipitates and colloidal particles into a form which can be filtered more easily. When slimy and strongly lyophilic, swelling precipitates are involved, the fibres of the filter flocs prevent formation of a continuous, impermeable layer on the filter. The resulting filter cake remains porous and permeable, and clogging of the filter is prevented.

Technical data

Grade	Properties
MN 101	qualitative filter flocs
MN 2101	ashless, quantitative filter flocs

Ordering information

MN 101		MN 2101	
500 g	1000 g	500 g	1000 g
48 11 00	48 11 10	28 11 20	28 11 30

Microscopy

Paper with good absorbent properties for absorbing liquids from microscopic preparations.

Technical data

Grade	Properties		Migration distance	Basis weight
MN 224	for absorbing liquids	0.2 mm	125 mm/30 min	90 g/m ²

Ordering information

MN 224			
Presentation	Pack of	REF	
blocks of 50 sheets 3.7 x 10 cm	100 blocks	18 50 00	

Blotting procedures and chromatography

Blotting papers

The smooth surface of these papers ensures a uniform, high absorptivity. They are particularly recommended for blotting procedures.

Chromatography papers

Paper chromatography requires high quality papers, since they have a considerable impact on the results of a separation. The chromatography papers listed below are almost exclu-

The chromatography papers listed below are almost exclusively produced from pure linters without addition of other substances. For this reason they show a low wet strength.



Technical data

Grade	Migration distance	Thickness	Basis weight	Application
MN 218 B	55- 65 mm/10 min	0.36 mm	180 g/m²	blotting
MN 827 B	130-140 mm/10 min	0.7 mm	270 g/m ²	blotting
MN 440 B	130–145 mm/10 min	1.0 mm	400 g/m ²	blotting
MN 214	90-100 mm/30 min	0.28 mm	140 g/m²	chromatography
MN 214 ff 1)	90-100 mm/30 min	0.28 mm	140 g/m²	chromatography
MN 218	90–100 mm/30 min	0.36 mm	180 g/m²	chromatography
MN 260	120-130 mm/30 min	0.20 mm	90 g/m²	chromatography
MN 261	90-100 mm/30 min	0.18 mm	90 g/m²	chromatography
MN 827	130-140 mm/10 min	0.70 mm	270 g/m²	chromatography
MN 866	100-120 mm/10 min	1.7 mm	650 g/m ²	chromatography

¹⁾ MN 214 defatted

Ordering information

References for packs of 100 sheets

MN 218 B		
Size		
58 x 60 cm	74 21 11	
30 x 60 cm	74 21 12	
57 x 46 cm	74 21 13	
20 x 20 cm	74 21 15	
15 x 20 cm	74 21 38	
21 x 9 cm	74 21 31	
13 x 10 cm	74 21 16	
10 x 7 cm	74 21 39	
9.3 x 8 cm	74 21 37	

58 x 60 cm	74 21 18	
20 x 20 cm	74 21 20	
16 x 16 cm	74 21 28	
MN 440 B		
58 x 60 cm	74 21 25	

MN 827 B

Size

MN 214		
Size		
58 x 60 cm	81 70 01	
MN 260		
58 x 60 cm	81 70 03	
MN 827		
58 x 60 cm	81 70 05	

MN 214 ff		
Size		
58 x 60 cm	81 70 08	
MN 261		
58 x 60 cm	81 70 04	
MN 866		
80 x 80 cm	81 70 07	
38 x 38 cm	81 70 06	

other sizes and cuts on request

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