

Filtration



High quality
filter papers for all purposes

MACHEREY-NAGEL



Filter papers

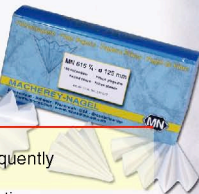
With MACHERY-NAGEL filtration products you can be sure that the grade that matches a particular application will continue to maintain the performance standards of consistency and quality.



MN 615

Qualitative filter papers

These filters are commonly used for procedures, or analytical techniques that are qualitative in nature. Although these filter papers are used in routine separations, there is a great need for purity and consistent quality.



MN 616 md

MN 616 w

MN 619

Most widely used general purpose filter paper with medium retention and flow rate. This filter paper covers a wide range of laboratory applications and is frequently used for clarifying liquids.

Slightly more retentive than MN 615 with a corresponding increase in filtration time.

Very fast filter paper with excellent retention of coarse particles and gelatinous precipitates. Used for examples for routine clean up of biological or organic solutions.

Filter paper with very high particle retention and slow flow rate. Excellent clarifying filter for cloudy suspensions and for water and soil analysis.

Ordering information for filter circles (○) and folded filters (☞); packs of 100

| Ø mm | MN 615 | | MN 616 md | | MN 617 | | MN 619 | |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ○ Ref. | ☞ Ref. | ○ Ref. | ☞ Ref. | ○ Ref. | ☞ Ref. | ○ Ref. | ☞ Ref. |
| 55 | 431005 | 531005 | 433005 | 533005 | 434005 | 534005 | 437005 | 537005 |
| 70 | 431007 | 531007 | 433007 | 533007 | 434007 | 534007 | 437007 | 537007 |
| 90 | 431009 | 531009 | 433009 | 533009 | 434009 | 534009 | 437009 | 537009 |
| 110 | 431011 | 531011 | 433011 | 533011 | 434011 | 534011 | 437011 | 537011 |
| 125 | 431012 | 531012 | 433012 | 533012 | 434012 | 534012 | 437012 | 537012 |
| 150 | 431015 | 531015 | 433015 | 533015 | 434015 | 534015 | 437015 | 537015 |
| 185 | 431018 | 531018 | 433018 | 533018 | 434018 | 534018 | 437018 | 537018 |
| 240 | 431024 | 531024 | 433024 | 533024 | 434024 | 534024 | 437024 | 537024 |



MN 640 m

MN 640 w

MN 640 d

Quantitative (ashless) filter papers

MACHERY-NAGEL ashless filter papers are produced under carefully controlled conditions that ensure a low ash level of < 0,01 %. They are utilized especially for routine quantitative gravimetric techniques.

White box
fast

Classic general purpose ashless filter paper with medium speed and medium retention. Typical applications include gravimetric analysis for numerous components, quantitative determinations of sediments and high purity clean up procedures

Grey box
medium fast

Fast ashless filter paper. Recommended for analytical procedures involving coarse particles or gelatinous precipitates.

Green box
slow

Ashless filter paper with very fine particle retention. Standard paper for critical gravimetric analysis or fine precipitates like barium sulfate or metastannic acid

Ordering information for filter circles, packs of 100

| MN 640 m | | MN 640 w | | MN 640 d | |
|----------|-----------|----------|-----------|----------|-----------|
| Ø mm | Reference | Ø mm | Reference | Ø mm | Reference |
| 55 | 203005 | 55 | 202005 | 55 | 205005 |
| 70 | 203007 | 70 | 202007 | 70 | 205007 |
| 90 | 203009 | 90 | 202009 | 90 | 205009 |
| 110 | 203011 | 110 | 202011 | 110 | 205011 |
| 125 | 203012 | 125 | 202012 | 125 | 205012 |
| 150 | 203015 | 150 | 202015 | 150 | 205015 |
| 185 | 203018 | 185 | 202018 | 185 | 205018 |
| 240 | 203024 | 240 | 202024 | 240 | 205024 |

Glass fibre filters

Glass fibre filters are widely applicable in many fields of laboratory use due to the exceptionally good resistance to most organic and inorganic solvents. They allow a fast filtration with simultaneous high particle retention and good loading capacity.



| | |
|--------------------|--|
| MN 85/90 | Most widely used general purpose glass fibre filter with very good mechanical stability. The filter contains an organic binder and is stable up to 200 °C. |
| MN 85/90 BF | Binder free filter paper for difference weight analysis. This paper is especially used in water treatment facilities for example for the determination of undissolved solids. |
| MN GF-1 | This binder free paper offers fine particle retention, high flow rate and good loading capacity. It is used for high efficiency laboratory filtration as well as air sampling. |
| MN GF-3 | Slightly more retentive than MN GF-1 this binder free paper is used for the collection of suspended solids in potable water as well as natural and industrial waste in many parts of the world |

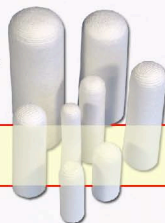
| MN 85/90 | | MN 85/90 BF | | MN GF-1 | | MN GF-3 | |
|-----------------|-----------|--------------------|-----------|----------------|-----------|----------------|-----------|
| Ø | Reference | Ø | Reference | Ø | Reference | Ø | Reference |
| 25 | 4050025 | 25 | 4060025 | 25 | 4110025 | 25 | 4130025 |
| 37 | 4050037 | 37 | 4060037 | 37 | 4110037 | 37 | 4130037 |
| 45 | 4050045 | 45 | 4060045 | 45 | 4110045 | 45 | 4130045 |
| 55 | 4050055 | 55 | 4060055 | 55 | 4110055 | 55 | 4130055 |
| 70 | 4050070 | 70 | 4060070 | 70 | 4110070 | 70 | 4130070 |
| 90 | 4050090 | 90 | 4060090 | 90 | 4110090 | 90 | 4130090 |
| 110 | 4050110 | 110 | 4060110 | 110 | 4110110 | 110 | 4130110 |
| 125 | 4050125 | 125 | 4060125 | 125 | 4110125 | 125 | 4130125 |
| 150 | 4050150 | 150 | 4060150 | 150 | 4110150 | 150 | 4130150 |

Extraction thimbles

MACHEREY-NAGEL extraction thimbles are worldwide known for their consistently high quality. They are mainly used in Soxhlet extraction units, particularly in food and soil analysis.

MN 645: Cellulose thimbles. Ordering information, packs of 25

| Size (internal diameter x external height) | Reference | Size (internal diameter x external height) | Reference |
|--|-----------|--|-----------|
| 20 x 80 | 645005 | 30 x 80 | 645020 |
| 22 x 80 | 645006 | 30 x 100 | 645023 |
| 28 x 80 | 645015 | 33 x 80 | 645951 |
| 29 x 100 | 645017 | 33 x 94 | 645022 |



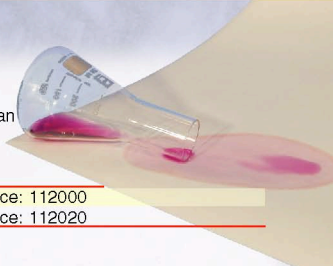
MN 649: Glass microfibre thimbles for high temperature filtration or when using solvents incompatible with cellulose thimbles.

Ordering information, packs of 25

| Size (internal diameter x external height) | Reference | Size (internal diameter x external height) | Reference |
|--|-----------|--|-----------|
| 22 x 80 | 649106 | 33 x 94 | 649122 |
| 33 x 80 | 649120 | 33 x 100 | 649123 |

Lab-Top, PE coated paper MN 210 PE

This highly absorbent paper is coated on one side with polyethylene, providing an impermeable layer for the protection of the subjacent surface. Spilled liquids are effectively absorbed and can be cleanly removed.



MN 210 PE 48x60 cm, pack of 100 sheets

Reference: 112000

MN 210 PE reel 100x0,6 m

Reference: 112020

Weighing aids

| | | | |
|-----------------|--|----------------------------------|--------------|
| MN 808 | These weighing boats are made from a special, nitrogen-free parchment. They are used to weigh viscous or syrupy substances | 100 pcs, 58x10x10 mm | Ref.: 486000 |
| | | 100 pcs, 70x23x15 mm | Ref.: 486001 |
| MN 226 | A very smooth transparent paper guaranteeing that the weighed goods can be transferred without loss | Block of 100 sheets 9x11,5 cm | Ref.: 186002 |
| MN 40/25 | Easy crushable parchment papers, especially for use in sugar industry. | 1000 pcs, 10x10 cm | Ref.: 194000 |

Filter Membranes Porafil

Filter membranes Porafil enable a very convenient, fast and economical separation. They are also suitable as neutral sample support for further analysis.

Porafil CM, cellulose mixed ester membranes

Membranes of cellulose mixed ester are recommended for the filtration of aqueous solutions in analytical and microbiological investigations.

Ordering information Porafil CM

| Pore size 0,2 µm | | | Pore size 0,45 µm | | |
|------------------|----------------|-------------|-------------------|----------------|-------------|
| Diameter [mm] | Membranes/pack | Reference | Diameter [mm] | Membranes/pack | Reference |
| 13 | 100 | 65100020013 | 13 | 100 | 65100045013 |
| 25 | 100 | 65100020025 | 25 | 100 | 65100045025 |
| 47 | 100 | 65100020047 | 47 | 100 | 65100045047 |
| 50 | 100 | 65100020050 | 50 | 100 | 65100045050 |

Porafil CM cellulose mixed ester membranes are also available as individual sterile packs. They are supplied individually sealed and commonly used for microbiological tests for example in beverage industry.

Ordering information sterile membranes Porafil CM

| | Pore size 0,45 µm | | |
|---------------------------------|-------------------|----------------|-------------|
| | Diameter [mm] | Membranes/pack | Reference |
| White membrane with black grid | 50 | 100 | 65300045050 |
| Green membranes with dark grid | 50 | 100 | 65320045050 |
| Black membranes with white grid | 50 | 100 | 65310045050 |

Porafil CA, cellulose acetate membranes

Membranes of cellulose acetate with good stability against aqueous and alcoholic media. These membranes are commonly used for general purpose microbiological filtrations.

Ordering information Porafil CA

| Pore size 0,2 µm | | | Pore size 0,45 µm | | |
|------------------|----------------|-------------|-------------------|----------------|-------------|
| Diameter [mm] | Membranes/pack | Reference | Diameter [mm] | Membranes/pack | Reference |
| 47 | 100 | 68000020047 | 47 | 100 | 68000045047 |
| 50 | 100 | 68000020050 | 50 | 100 | 68000045050 |
| 142 | 25 | 68000020142 | 142 | 25 | 68000045142 |