# MACHEREY-NAGEL

# Filtration Bestsellers





# Filtration Bestsellers - High quality filters for all applications

# Qualitative filter papers

#### Standard filter papers for qualitative analyses

MACHEREY-NAGEL qualitative filter papers are widely used for routine separations. The wide variety of grades provides a great choice of particle retention and filtration speed alternatives. Qualitative filter papers are manufactured from top quality raw materials using ultra-pure water to ensure consistent and reliable filtration.

Grade		Properties
MN 615	≡ No. 1	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 applied for clarifying liquids.
MN 616 md	≡ No. 2	Slightly more retentive than MN 615 with a corresponding increase in filtration time.
MN 617	≡ No. 4	Very fast filter paper with excellent retention of coarse particles and gelantinous precipitates. Used for example in routine clean up of biological or organic solutions.
MN 619		Filter paper with very high particle retention and slow flow rate. Excellent clarifying capacity for cloudy suspensions and for water and soil analysis.

#### Ordering information

Diameter	MN 615		MN 616 r	nd	MN 617		MN 619	
90 mm	431009	531009	433009	533009	434009	534009	437009	537009
110 mm	431011	531011	433011	533011	434011	534011	437011	537011
125 mm	431012	531012	433012	533012	434012	534012	437012	537012
150 mm	431015	531015	433015	533015	434015	534015	437015	537015
185 mm	431018	531018	433018	533018	434018	534018	437018	537018
240 mm	431024	531024	433024	533024	434024	534024	437024	537024

Filter circles and folded filters, pack of 100 pieces

# Quantitative filter papers

#### Ashless filter papers for quantitative analyses

MACHEREY-NAGEL manufactures a broad range of ashless filter papers that are refined and purified in a highly developed clean-up process to remove organic and inorganic impurities. This ensures a low ash content of < 0.01%, consistent performance and safe results in gravimetric analyses.

Grade		Properties
MN 640 m	≡ No. 43	Classic, general purpose, ashless filter paper with medium speed and medium retention. Typical applications include gravimetric analyses for components, quantitative determinations of sediments and high purity clean up procedures.
MN 640 w	≡ No. 41	Fast, ashless filter paper. Recommended for analytical procedures involving coarse particles or gelantinous precipitates.
MN 640 d	≡ No. 42	Ashless filter paper with very fine particle retention. Standard paper for critical gravimetric analyses of fine precipitates like barium sulfate or metastannic acid.

#### Ordering information

Diameter	MN 640 m	MN 640 w	MN 640 d	
90 mm	203009	202009	205009	
110 mm	203011	202011	205011	
125 mm	203012	202012	205012	
150 mm	203015	202015	205015	
185 mm	203018	202018	205018	
240 mm	203024	202024	205024	

Filter circles, pack of 100 pieces

#### Good to know

Qualitative filter papers are perfectly suited for general laboratory filtration e.g. determination of dry matter.



#### Good to know

Ashless filter papers are color

MN 640 m = white label = white ribbon MN 640 w = ■ grey label = ■ black ribbon MN 640 d = ■ green label = ■ blue ribbon



# Filtration Bestsellers – High quality filters for all applications

#### Glass fiber filters

#### Glass microfiber filters for gas and liquid filtration

MACHEREY-NAGEL glass microfiber filters are manufactured from 100 % borosilcate glass. They have wide applications when fine filtration and high loading capacity is required. Due to the intrinsic properties of borosilicate glass they also allow a safe filtration of aggressive solutions including strong acids and bases.

Grade		Properties
MN 85/90		Most widely used, general purpose glass fiber filter with high mechanical stability. It 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 espe- cially used in water treatment facilities for example for the determination of undissolved solids.
MN 85/70		Slightly less retentive than MN 85/90, lighter and thinner. The filter contains an organic binder for high mechanical strength.
MN 85/70 BF		Binder free alternative to MN 85/70. Suitable for gravimetric analyses with heat stability up to 500 °C.
MN GF-1	≡ GF/A	Binder free paper with fine particle retention, high flow rate and good loading capacity. It is used for laboratory filtration and air sampling.
MN GF-3	≡ GF/C	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 water in many parts of the world.

# Ordering information

Diameter	MN 85/90	MN 85/90 BF	MN 85/70	MN 85/70 BF	MN GF-1	MN GF-3
25 mm	4050025	4060025	4030025	4040025	4110025	4130025
47 mm	4050047	4060047	4030047	4040047	4110047	4130047
50 mm	4050050	4060050	4030050	4040050	4110050	4130050
55 mm	405005	406005	403005	404005	411005	413005
70 mm	405007	406007	403007	404007	411007	413007
90 mm	405009	406009	403009	404009	411009	413009
110 mm	405011	406011	403011	404011	411011	413011
125 mm	405012	406012	403012	404012	411012	413012
150 mm	405015	406015	403015	404015	411015	413015
Filter circles, pac	ck of 100 pieces					

### Extraction thimbles

#### Extraction thimbles from cellulose or glass fiber

MACHEREY-NAGEL manufactures extraction thimbles from top quality raw materials using ultra-pure water. They are typically used in Soxhlet extraction units, particularly for fat analysis of food and feed and for the analysis of soil contaminants.

Grade	Properties
MN 645	Extraction thimbles made of pure cellulose.
MN 649	Glass microfiber thimbles for high temperature filtration or for solvents incompatible with cellulose thimbles.

# Ordering information

_			
Size ID x H	MN 645	MN 649	
19 x 90 mm	645256	649160	
20 x 80 mm	645005	-	
22 x 80 mm	645006	649106	
28 x 80 mm	645015	649115	
30 x 80 mm	645020	<del>-</del>	
30 x 100 mm	645023	649117	
33 x 80 mm	645951	649120	
33 x 94 mm	645022	649122	
33 x 205 mm	645026	649126	

Pack of 25 pieces

#### Good to know

An organic binder is used in some grades to enhance the mechanical stability. Binder-free grades have a higher thermal stability up to 500 °C.



MN 649 extraction thimbles are made from glass microfibers and are used for dust determinations in hot







# Filtration Bestseller - High quality filters for all applications

#### Membranes PORAFIL®

#### Membranes for aqueous and organic solutions

MACHEREY-NAGEL filter membranes PORAFIL® are manufactured under strictly controlled conditions in highly elaborated processes. They are used in a large variety of procedures ranging from general-purpose water filtrations to microbiological determinations.

# 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

Diameter	Color	Pore size	Sterile	REF
47 mm	White	0.45 µm	No	65100045047
47 mm	White, with grid	0.45 µm	No	65600045047
47 mm	White, with grid	0.45 µm	Yes	65300045047
50 mm	White	0.45 µm	No	65100045050
50 mm	White, with grid	0.45 µm	Yes	65300045050
142 mm	White	0.45 µm	No	65100045050

Pack of 100 pieces

# PORAFIL® RC, regenerated cellulose membranes

Membranes of regenerated cellulose are resistant towards most organic solvents. They are used for filtration of solvent mixtures and HPLC eluent ultrapurification.

# Ordering information

Diameter	Color	Pore size	Pack of	REF
47 mm	White	0.45 μm	100	659045047
50 mm	White	0.45 μm	100	659045050
100 mm	White	0.45 µm	25	659045100
142 mm	White	0.45 μm	25	659045142

#### Good to know

PORAFIL® CM cellulose mixed ester membranes are also available as individually sealed, sterile packs.





#### Weighing aids

Grade	Туре	Properties	Format	Pack of	REF
MN 808	Weighing boats	These weighing boats are made from a special, nitrogen-free parchment. They are used to weigh viscous or syrupy substances.	58 x 10 x 10 mm 70 x 23 x 15 mm	100 100	486000 486001
MN 226	Weighing paper	A very smooth transparent paper guaranteeing that the weighed goods can be transferred without loss.	11.5 x 9 cm	Block of 100 sheets	186002
MN 40/25	Parchment sheets	Easily crushable parchment papers, especially used in sugar industry.	10 x 10 cm	1000	194000

#### Surface protection paper LAB-TOP

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

### Ordering information

Grade	Format	Size	Pack of	REF
MN 210 PE	sheets	48 x 60 cm	100	112000
MN 210 PE	Reel	100 x 0.48 m	1	112020
MN 210 PE	reel	100 x 0.6 m	1	112010

#### www.mn-net.com

# MACHEREY-NAGEL



Tel.: +49 24 21 969-0 Fax: +49 24 21 969-199 E-mail: info@mn-net.com Tel.: +41 62 388 55 00 Fax: +41 62 388 55 05 E-mail: sales-ch@mn-net.com Tel.: +33 388 68 22 68 Fax: +33 388 51 76 88 E-mail: sales-fr@mn-net.com US:
Tel.: +1 484 821 0984
Fax: +1 484 821 1272
E-mail: sales-us@mn-net.com

