

LLG-Filter paper, qualitative grades

Made from 100 % cellulose.
Ash content 0.06 %.
Filtration speed according to DIN 53137.
Capacity of separation according to DIN 53135.

1 LLG-Qualitative filter paper, circles

Very fast, pore size 12 to 15 µm.

- For coarse and voluminous precipitates like hydroxides and sulphides

Diam. mm	Filtration time secs.	PK	Cat. No.
90	10	100	9.045 830
110	10	100	9.045 831
125	10	100	9.045 832
150	10	100	9.045 833
185	10	100	9.045 834



2 LLG-Qualitative filter paper, circles

Medium fast, pore size 5 to 8 µm or 5 to 13 µm

- for fast filtration with fine particles

Diam. mm	Filtration time secs.	Pore size µm	PK	Cat. No.
42.5	50	5 - 8	100	9.045 820
90.0	50	5 - 8	100	9.045 821
110.0	50	5 - 8	100	9.045 822
125.0	50	5 - 8	100	7.970 266
150.0	50	5 - 8	100	7.970 269
185.0	50	5 - 8	100	6.242 668
240.0	50	5 - 8	100	6.242 631
42.5	88	5 - 13	100	9.045 800
47.0	88	5 - 13	100	9.045 801
55.0	88	5 - 13	100	9.045 802
70.0	88	5 - 13	100	9.045 803
90.0	88	5 - 13	100	9.045 804
110.0	88	5 - 13	100	9.045 805
125.0	88	5 - 13	100	9.045 806
150.0	88	5 - 13	100	9.045 807
185.0	88	5 - 13	100	9.045 808
240.0	88	5 - 13	100	9.045 809



3 LLG-Qualitative filter paper, folded filters

Medium fast, pore size 5 to 8 µm.

- For fast filtration with fine particles

Diam. mm	Filtration time secs.	PK	Cat. No.
70	50	100	7.659 027
125	50	100	9.045 825
150	50	100	9.045 826
185	50	100	9.045 827
240	50	100	6.242 632



4 LLG-Qualitative filter paper, circles

Slow, pore size 2 to 3 µm.

- for BaSO₄, SnO₄, CuO, Cu₂O

Diam. mm	Filtration time secs.	PK	Cat. No.
70	180	100	7.970 267
90	180	100	7.970 268
110	180	100	6.242 672
125	180	100	7.970 134
150	180	100	7.970 139
185	180	100	6.242 671
240	200	100	7.971 615



5 LLG-Qualitative filter paper, sheets

Medium fast, pore size 5 to 13 µm.

- for analytical works in laboratories

Dimensions mm	Filtration time secs.	PK	Cat. No.
460 x 570	88	100	9.045 810



Filtration/Filter paper, qualitative

1


1 Qualitative filter papers MN 614, round filters

Medium-fast.

MACHERY-NAGEL

- Embossed
- For determination of sugar content, colour, essential oils and emulsions
- Weight: 75 g/m²
- Thickness: 0.25 mm

Diam. mm	Filtration time secs.	PK	Cat. No.
55	20	100	9.047 400
70	20	100	9.047 401
90	20	100	9.047 402
110	20	100	9.047 403
125	20	100	9.047 404
150	20	100	9.047 405
185	20	100	9.047 406
240	20	100	9.047 407
270	20	100	9.047 408
320	20	100	9.047 409
385	20	100	9.047 410
500	20	100	9.047 411

2


2 Filter paper, qualitative, type MN 615, circles

Medium speed, smooth.

MACHERY-NAGEL

Diam. mm	Filtration time secs.	PK	Cat. No.
55	22	100	9.047 500
70	22	100	9.047 501
90	22	100	9.047 502
110	22	100	9.047 503
125	22	100	9.047 504
150	22	100	9.047 505
185	22	100	9.047 506
240	22	100	9.047 507

3


3 Filter paper, qualitative, type MN 615 1/4, filter circles

Medium fast filtration, smooth.

MACHERY-NAGEL

For fat determinations, free from fats and resins.
Ether soluble residue <0.1 mg for diam. 270 mm filters.

Diam. mm	Filtration time secs.	Thickness mm	PK	Cat. No.
55	22	0.16	100	9.048 500
70	22	0.16	100	9.048 501
90	22	0.16	100	9.048 502
110	22	0.16	100	9.048 503
125	22	0.16	100	9.048 504
150	22	0.16	100	9.048 505
185	22	0.16	100	9.048 506
240	22	0.16	100	9.048 507
270	22	0.16	100	9.048 508
320	22	0.16	100	9.048 509
385	22	0.16	100	9.048 510
400	22	0.16	100	4.001 029
500	22	0.16	100	9.048 511

4


4 Filter paper MN 617 1/4, qualitative, folded filters

Fast filtration, smooth.

MACHERY-NAGEL

Diam. mm	Filtration time secs.	PK	Cat. No.
90	9	100	9.048 702
110	9	100	9.048 703
125	9	100	9.048 704
150	9	100	9.048 705
185	9	100	9.048 706
240	9	100	9.048 707

6. Distillation, separation, filtration Filtration/Filter paper, qualitative

1 Qualitative Filter Paper, Grade 2555 1/2, qualitative

For filtration of the mash when determining the extract in malt and wort according to the analytical regulations of the EBC. Also used for removal of carbon dioxide from beer.

Whatman

1



Diam. mm	PK	Cat. No.
185	100	7.009 656
240	100	7.009 657
320	100	7.060 298

2 Filter paper, Grade 1

Circles and sheets. Qualitative. The most widely used grade of filter paper.

Whatman

2

Flowrate: Medium
Retention: Medium
Wet strength: Low
Thickness: 0.18 mm



Diam. mm	PK	Cat. No.
10	500	6.228 829
20	400	9.048 942
25	400	9.048 943
30	400	9.048 944
32	100	9.048 937
42,5	100	9.056 199
47	100	9.048 945
55	100	9.056 200
70	100	9.056 201
85	100	9.048 946
90	100	9.056 202
110	100	9.056 203
125	100	9.056 204
150	100	9.056 205
185	100	9.056 206
240	100	9.056 207
270	100	9.056 208
320	100	9.056 209
400	100	9.056 278
500	100	9.056 279
460 x 570	100	9.056 331
26 x 31	1000	9.056 337
75 x 100	500	9.056 338
460 x 570	500	9.056 340
580 x 680	100	9.056 341

3 Filter paper, Grade 2

Circles and sheets. Qualitative. Slightly thicker and more retentive than number 1.

Whatman

3

Flowrate: Medium
Retention: Medium
Wet strength: Low
Thickness: 0.19 mm
Ash: 0.06 %



Diam. mm	PK	Cat. No.
42,5	100	9.056 198
47	100	6.242 786
55	100	9.056 210
70	100	9.056 211
90	100	9.056 212
110	100	9.056 213
125	100	9.056 214
150	100	9.056 215
185	100	9.056 216
240	100	9.056 217
320	100	9.056 219
460 x 570	100	9.056 332
580 x 680	100	6.236 821

Filtration/Filter paper, qualitative



1 Filter paper, Grade 3

Circles and sheets. Qualitative. Very thick. Double the thickness of number 1.

Whatman

Flowrate: Medium
 Retention: High
 Wet strength: High
 Thickness: 0.39 mm
 Ash: 0.06 %

Diam. mm	PK	Cat. No.
55	100	9.056 220
70	100	9.056 221
90	100	9.056 222
110	100	9.056 223
125	100	9.056 224
150	100	9.056 225
185	100	9.056 226
240	100	9.056 227
460 x 570	100	9.056 333



2 Filter paper, Grade 4

Circles. Qualitative. Fast flowrate. Excellent retention of coarse and gelatinous precipitants. Smooth. Supplied in packs of circles as outlined below.

Whatman

Flowrate: Fast
 Retention: High
 Wet strength: Low
 Thickness: 0.21 mm
 Ash: 0.06 %

Diam. mm	PK	Cat. No.
41	100	6.286 923
42,5	100	9.056 231
55	100	9.056 233
70	100	9.056 235
90	100	9.056 196
110	100	9.056 230
125	100	9.056 232
150	100	9.056 234
185	100	9.056 236
240	100	9.056 237
270	100	9.056 238
320	100	9.056 239
460 x 570	100	9.056 334



3 Filter paper, Grade number 5

Circles. Qualitative. Slow flowrate. Retains fine precipitates, grained surface. Supplied in packs of circles as outlined below.

Whatman

Flowrate: Slow
 Retention: High
 Wet strength: High
 Thickness: 0.20 mm
 Ash: 0.06 %

Diam. mm	PK	Cat. No.
55	100	9.056 240
70	100	9.056 241
90	100	9.056 242
110	100	9.056 243
125	100	9.056 244
150	100	9.056 245
185	100	9.056 246
240	100	9.056 247

6. Distillation, separation, filtration Filtration/Filter paper, qualitative

1 Filter paper, Grade number 6

Circles. Qualitative. Slow, faster as Grade 5. Supplied in packs of circles as outlined below.

Whatman

Flowrate: Slow
Retention: High
Wet strength: Low
Thickness: 0.18 mm
Ash: 0.20 %

Diam. mm	PK	Cat. No.
70	100	9.056 251
90	100	9.056 252
110	100	9.056 253
125	100	9.056 254
150	100	9.056 255
185	100	9.056 256
240	100	9.056 257

1



2 Filter Papers, Grade 50, qualitative, circles and sheets

Compatible with Hirsch or Büchner funnels, average thickness 115 µm.
Acid-treated for high wet-strength and chemical resistance.

Whatman

- Nominal particle retention of 2.7 µm
- Slow flow rates (Herzberg filtration speed 2685 s)
- High purity and low ash content (0.015 % ash maximum)

Diam. mm	PK	Cat. No.
42.5	100	6.233 382
55	100	9.056 450
70	100	9.056 451
90	100	9.056 452
110	100	9.056 453
125	100	9.056 454
150	100	9.056 455
185	100	9.056 456
240	100	9.056 457
320	100	9.056 459
500	100	9.056 525
460 x 570	100	9.056 550

2



3 Filter paper, Grade 91

Circles. Qualitative. General purpose schools grade, creped.

Whatman

Flowrate: Medium
Retention: Medium
Wet strength: High
Thickness: 0.205mm

Diam. mm	PK	Cat. No.
110	100	9.048 938
125	100	9.048 933
150	100	9.048 939
185	100	9.048 934
240	100	9.048 940

3



4 Filter paper, Grade 113

Circles. Qualitative. Fast flow. Excellent retention of coarse and gelatinous precipitates, creped.

Whatman

Flow rate: Fast
Retention: Medium
Wet strength: High
Thickness: 0.42mm
Ash: 0.06%

Diam. mm	PK	Cat. No.
90	100	9.049 015
125	100	9.049 016
150	100	9.049 017
185	100	9.049 018
240	100	9.049 019

4



Filtration/Filter paper, qualitative

1



1 Qualitative filter paper, Grade 595, circles

Medium fast 4 to 7 µm

- thin filter paper
- for medium to fine precipitates and general laboratory work
- Weight: 68 g/m²
- Thickness: 0.150 mm

Whatman

Diam. mm	PK	Cat. No.
110	100	9.062 303
125	100	9.062 304
150	100	9.062 305

2



2 Qualitative filter paper, Grade 597, circles and sheets

Medium fast, 4 - 7 µm

- thicker and faster than 595
- for medium to fine precipitates
- Weight 81 g/m²
- Thickness 0.180 mm

Whatman

Diam. mm	PK	Cat. No.
45	100	7.009 631
55	100	9.062 400
70	100	9.062 401
90	100	9.062 402
110	100	9.062 403
125	100	9.062 404
150	100	9.062 405
185	100	9.062 406
240	100	9.062 407
580 x 580	100	9.066 597

3



3 Filter Papers, circles, quadrant folded, cellulose

Filter papers in a flat, quadrant folded format to fit conical filter funnels. Easy and time-saving handling for analyses with high sample throughput.

Whatman

Type	Diam. mm	Thickness mm	Weight g / m ²	Ash content %	PK	Cat. No.
Grade 1 FF	110	0.180	87	0.060	500	4.668 159
Grade 1 FF	125	0.180	87	0.060	500	4.668 160
Grade 1 FF	150	0.180	87	0.060	500	4.668 161
Grade 40 FF	110	0.210	95	0.007	500	4.668 153
Grade 40 FF	125	0.210	95	0.007	500	4.668 154
Grade 40 FF	150	0.210	95	0.007	500	4.668 155
Grade 44 FF	110	0.215	85	0.007	500	4.668 156
Grade 44 FF	125	0.215	85	0.007	500	4.668 157
Grade 44 FF	150	0.215	85	0.007	500	4.668 158

4



4 Filter Papers, circles, pyramid version

Filter papers in a flat, pyramidal folded format. Easy and time-saving handling.

Whatman

Type	Diam. mm	Thickness mm	Weight g / m ²	Ash content %	PK	Cat. No.
Grade 6	125	0.18	100	0.150	1000	4.668 162
Grade 40	125	0.21	95	0.007	1000	4.668 163

We can **supply** this
manufacturer's whole
product range !



Whatman®

6. Distillation, separation, filtration Filtration/Filter paper, qualitative

1 Filter paper, Grade number 2 V

Qualitative. Folded (pre-pleated) version of Number 2.
 Flowrate: Medium
 Retention: Medium
 Wet strength: Low
 Thickness: 0.19 mm
 Ash: 0.06 %

Whatman

Diam. mm	PK	Cat. No.
125	100	9.056 304
150	100	9.056 305
185	100	9.056 306
240	100	9.056 307
270	100	9.056 308
320	100	9.056 309

1



2 Filter paper, grade 113 V

Circles. Prepleated. Qualitative. Excellent retention of coarse and gelatinous precipitates, creped.

Whatman

Flow rate: Fast
 Retention: Medium
 Wet strength: High
 Thickness: 0.42 mm

Diam. mm	PK	Cat. No.
125	100	9.056 294
150	100	9.056 295
185	100	9.056 296
240	100	9.056 297
270	100	9.056 298
320	100	9.056 299
500	100	9.056 301

2



3 Qualitative filter paper, Grade 593 1/2, folded filters

Medium to slow 2 to 5 µm

Whatman

- time saving, because folded filters have a larger surface area than comparable circular filters
- for medium to fine precipitates and general laboratory work
- Weight: 85 g/m²
- Thickness: 0.17 mm

Diam. mm	PK	Cat. No.
185	100	9.063 106
240	100	9.063 107

3



4 Qualitative filter paper, Grade 595 1/2, folded filters

Medium fast, 4 - 7 µm.

Whatman

- time saving, because folded filters have a larger surface area
- filter faster than comparable circular filters
- for medium to fine precipitates and general laboratory work
- Weight: 68 g/m²
- Thickness: 0.15 mm

Diam. mm	PK	Cat. No.
70	100	9.063 301
90	100	9.063 302
110	100	9.063 303
125	100	9.063 304
150	100	9.063 305
185	100	9.063 306
210	100	7.009 626
240	100	9.063 307
270	100	9.063 308
320	100	9.063 309
385	100	9.063 310

4



Filtration/Filter paper, qualitative

1


1 Qualitative filter paper, Grade 597 1/2, folded filters

Medium fast, 4 - 7 µm
Whatman

- time saving, because folded filters have a larger surface area
- for medium to fine precipitates
- Weight: 81 g/m²
- Thickness: 0.18 mm

Diam. mm	PK	Cat. No.
70	100	9.063 401
90	100	9.063 402
110	100	9.063 403
125	100	9.063 404
150	100	9.063 405
185	100	9.063 406
240	100	9.063 407
270	100	9.063 408
320	100	9.063 409
385	100	9.063 410
500	100	9.063 411

2


2 Qualitative filter paper, Grade 602h 1/2, folded filters

Slow < 2 µm
Whatman

- thick filter paper
- for fine precipitates
- Weight: 85 g/m²
- Thickness: 0.15 mm

Diam. mm	PK	Cat. No.
90	100	9.063 702
125	100	9.063 704
150	100	9.063 705
185	100	9.063 706
240	100	9.063 707

3


3 Qualitative filter paper, Grade 604 1/2, folded filters

Fast, 12 to 25 µm
Whatman

- time saving, because folded filters have a larger surface area
- filter faster than comparable circular filters
- for coarse precipitates (e.g. hydroxide and sulphide)
- Weight: 80 g/m²
- Thickness: 0.19 mm

Diam. mm	PK	Cat. No.
125	100	9.063 904
150	100	9.063 905
185	100	9.063 906
240	100	9.063 907
320	100	9.063 909

4


4 Qualitative filter paper, Grade 1573 1/2, folded filters

Fast, 12 to 25 µm
Whatman

- wet-strength
- time saving, because folded filters have a larger surface area than circular filters of the same diameter
- Weight: 88 g/m²
- Thickness: 0.17 mm

Diam. mm	PK	Cat. No.
125	100	9.065 104
150	100	9.065 105
185	100	9.065 106
240	100	9.065 107
270	100	9.065 108
320	100	9.065 109

Filter Paper, qualitative, folded filters

Highly pure filter paper (approx. 0.08 % ash) recommended for precise identification of materials and for sample preparation prior to sensitive detection methods. These filter papers are perfectly qualified for food control according to LFGB paragraph 64 para. 1 and 2, beverage analysis and environmental monitoring.

Hahnemühle

- Made of the same raw materials (super-refined cotton linters and cellulose) like quantitative filter papers
- High stability and durability due to alpha-Cellulose content above 95 %

1 Filter paper 595, qualitative, folded filters

Hahnemühle

Diam.	Weight	Filtration time acc. to Herzberg	Thickness	PK	Cat. No.
mm	g / m ²	s	mm		
90	68	160	0.15	100	4.006 260
110	68	160	0.15	100	4.006 261
125	68	160	0.15	100	4.006 262
150	68	160	0.15	100	4.006 263
185	68	160	0.15	100	4.006 264
240	68	160	0.15	100	4.006 266
270	68	160	0.15	100	4.006 267
320	68	160	0.15	100	4.006 268
385	68	160	0.15	100	4.006 269
500	68	160	0.15	100	4.664 858

2 Filter paper 597, qualitative, folded filters

Hahnemühle

Diam.	Weight	Filtration time acc. to Herzberg	Thickness	PK	Cat. No.
mm	g / m ²	s	mm		
90	85	155	0.18	100	4.006 271
110	85	155	0.18	100	4.006 272
125	85	155	0.18	100	4.006 273
150	85	155	0.18	100	4.006 274
185	85	155	0.18	100	4.006 275
240	85	155	0.18	100	4.006 277
270	85	155	0.18	100	4.006 278
320	85	155	0.18	100	4.006 279
385	85	155	0.18	100	4.006 280

3 Filter Paper, for clarification, folded filters

Recommended for identification of substances, clarification of liquids and for the preparation of samples in a broad range of chemical analysis.

Hahnemühle

- Creped filter papers have a particularly large surface area and correspondingly shorter filtration times
- For quick separation of large particles
- For reliable clarification of viscous liquids

Type	Diam.	Weight	Filtration time acc. to Herzberg	Thickness	PK	Cat. No.
	mm	g / m ²	s	mm		
0858	150	75	110	0.17	100	4.006 179
0858	240	75	110	0.17	100	4.006 181
0858	320	75	110	0.17	100	4.006 182
0860	150	74	120	0.17	100	4.006 184
0860	185	74	120	0.17	100	4.006 185
0860	320	74	120	0.17	100	4.006 187
0905	320	74	40	0.27	100	4.006 188
400	70	65	200	0.17	100	4.006 214
400	90	65	200	0.17	100	4.006 215
400	110	65	200	0.17	100	4.006 216
400	125	65	200	0.17	100	4.006 217
400	130	65	200	0.17	100	4.006 218
400	150	65	200	0.17	100	4.006 219
400	185	65	200	0.17	100	4.006 220
400	200	65	200	0.17	100	4.006 221
400	250	65	200	0.17	100	4.006 223
400	300	65	200	0.17	100	4.006 224
400	320	65	200	0.17	100	4.006 225
400	350	65	200	0.17	100	4.006 226
400	400	65	200	0.17	100	4.006 227
400	500	65	200	0.17	100	4.006 228
400	650	65	200	0.17	100	4.006 229



Filtration/Filter paper, qualitative


1

1 Qualitative Filters for beer analysis

Suitable for analytical methods in breweries to filter and analyse, based upon recommended procedures of the EBC (European Brewery Convention).

Hahnemühle

- Medium fast
- Grained surface

Further sizes on request.

Type	Diam. mm	Weight g / m ²	Filtration time acc. to Herzberg s	Thickness mm	PK	Cat. No.
Folded filter	185	75	110	0.17	100	4.006 207
Folded filter	240	75	110	0.17	100	4.006 208
Folded filter	320	75	110	0.17	100	4.006 209
Filter circles	185	75	110	0.17	100	4.006 395
Filter circles	240	75	110	0.17	100	4.006 396


2

2 Germ Testing Papers

For carrying out germ resistance tests. All papers are made from high-purity cellulose and are free of spores, bacteria and toxic substances that could influence the germination of the seeds. The highly absorbent papers store water for the entire duration of the tests. All germ test papers meet the requirements of ISTA and AOSA.

Hahnemühle

- Reliable seed testing
- Conductivity 40 mS/m
- pH value between 6.0 and 7.5
- High absorbance
- Roots do not grow through the paper
- Papers conform to ISTA recommendations of 2017

Type	Description	Weight g / m ²	Thickness mm	Dimensions (D x W) mm	Colour	PK	Cat. No.
3014	pleated strips for germ testing, 50 double pleats	110	0.22	110 x 2000	white	306	6.254 182
3014	pleated strips for germ testing, 50 double pleats	110	0.22	110 x 2000	white	1008	4.006 111
3236	pleated strips for germ testing, 50 double pleats	110	0.22	110 x 2000	grey	1008	4.006 112
0858	wrapping strips for pleated strips, sheets	75	0.17	110 x 580		500	4.006 047
520b	filter sheet	155	0.65	580 x 580	white	100	6.241 855
5703	absorbent filter paper, technical, sheets	240	0.55	580 x 580	white	100	4.006 062


3

3 Germ testing papers

The testing papers do not contain any substances which could influence the growth of seeding. The colors used are non-toxic to germinating seed. The moisture level is maintained throughout the germination test period. The filter papers comply with ISTA and AOSA requirements.

Ahlstrom-Munksjö

Description	Weight g / m ²	Thickness mm	Dimensions (D x W) mm	Colour	PK	Cat. No.
Grade 1765, pleated strips, 50 double pleats	110	0.22	2000 x 110	white	1000	7.971 775
Grade 1700, with slot for wicks	135	0.31	∅ 85	white	500	7.970 731
Grade 1750	90	0.20	220 x 400	white	500	6.237 070
Grade 1755, PE coated paper	53	0.19	190 x 400	-	500	6.237 071


4

4 Qualitative Filters 551, black, round filters

Recommended for the detection of very fine traces of light-coloured particles and precipitates.

Hahnemühle

- Made of pure celluloses and with constriction of black additives
- White and light-coloured particles can be detected easily by the strong contrast to the black filter paper
- Weight 95 g/m²
- Thickness 0.2 mm
- Filtration speed acc. to Herzberg 850 s

Further sizes on request.

Diam. mm	PK	Cat. No.
90	100	7.657 096
240	100	6.236 831

1 Filter paper, qualitative, Grade 3 hw, folded filters

Sartorius Lab Instruments

Diam. mm	PK	Cat. No.
90	100	9.049 401
110	100	9.049 402
125	100	9.049 403
150	100	9.049 404
185	100	9.049 405
240	100	9.049 406
270	100	9.049 407
320	100	9.049 408
385	100	9.049 409

Other diameters/formats are available on request.

1



2 Filter paper, qualitative, Grade 3 hw, circles

Sartorius Lab Instruments

Material: alpha cellulose (95 %)
 Properties: medium speed filtration, thin
 Filtration time: 15 to 25 secs.
 Surface weight: 65 g/m²
 Ash content: < 0.1 %

Diam. mm	PK	Cat. No.
55	100	9.049 420
70	100	9.049 421
90	100	9.049 422
110	100	9.049 423
125	100	9.049 424
150	100	9.049 425
185	100	9.049 426
240	100	9.049 427
270	100	9.049 428
320	100	9.049 429
385	100	9.049 457

Other diameters/formats are available on request.

2



Filter paper, soil analysis

For detecting nutrients available to plants, low in nitrogen and phosphorus.

Sartorius Lab Instruments

Grade 131

Properties: slow filtration
 Filtration time in accordance with DIN 53137: 80 to 140 secs.
 Surface weight: 80 g/m²

Grade 132

Properties: medium fast filtration
 Filtration time in accordance with DIN 53137: 35 to 75 secs.
 Surface weight: 80 g/m²

Type	Diam. mm	PK	Cat. No.
Folded filters 131	150	100	9.049 550
Folded filters 131	185	100	9.049 551
Folded filters 132	150	100	9.049 552
Folded filters 132	185	100	9.049 553

3 Technical Filter Papers, sheets

Dimensions: 580 x 580 mm, creped.

Other dimensions are available on request.

Sartorius Lab Instruments

Type	Weight g / m ²	Filtration time secs.	PK	Cat. No.
100/N	85	30	100	7.606 410
3 h	65	35	100	7.671 897
3 hw	65	20	100	9.049 458
3 m/N	65	30	100	7.606 373
3 S/h	200	55	100	9.049 619
3 w	65	15	100	9.067 003
4 b	75	22	100	9.067 004
6	80	15	100	7.058 772
6 S/N*	145	12	100	6.253 513

* creped.

3



Filtration/Filter paper, quantitative

LLG-Filter papers for quantitative analysis

Made from 100 % cellulose.
Ash content 0.007 %.
Filtration speed according to DIN 53137.
Capacity of separation according to DIN 53135.

1


1 LLG-Quantitative filter paper, circles

Very fast, pore size 12 to 15 µm

- for coarse, high volume precipitates
- for determinations according to the German Standard Methods for the examination of water, waste water and sludge.
- for $\text{Fe}(\text{OH})_2$, $\text{Al}(\text{OH})_3$, NaSO_4
- ashless, equivalent black tape

Diam. mm	Filtration time secs.	PK	Cat. No.
70	10	100	9.045 840
90	10	100	9.045 841
110	10	100	9.045 842
125	10	100	9.045 843
150	10	100	9.045 844
185	10	100	9.045 845

2


2 LLG-Quantitative filter paper, circles

Fast, pore size 8 to 12 µm.

- most frequently used quantitative filter
- for PbS , Ag_2S , FeS , carbonates
- ashless, equivalent white tape

Diam. mm	Filtration time secs.	PK	Cat. No.
90	20	100	7.970 057
110	20	100	7.970 000
125	20	100	7.970 058
150	20	100	7.970 001
185	20	100	7.970 002
200	20	100	6.242 179

3


3 LLG-Quantitative filter paper, circles

Medium fast, pore size 5 to 8 µm.

- for NH_4MgPO_4 , CaC_2O_4 , BaSO_4
- ashless, equivalent red tape

Diam. mm	Filtration time secs.	PK	Cat. No.
55	50	100	6.256 437
70	50	100	7.970 571
90	50	100	7.970 032
110	50	100	6.242 748
125	50	100	7.970 045
150	50	100	6.252 765
185	50	100	6.242 747
240	50	100	7.970 591

4


4 LLG-Quantitative filter paper, circles

Slow, pore size 2 to 3 µm.

- for very fine precipitates and small particles
- for soil analysis
- for BaSO_4 (hot precipitate), PbSO_4 , Cu_2O , ZnS , NiS
- ashless, equivalent blue tape

Diam. mm	Filtration time secs.	PK	Cat. No.
47	180	100	6.285 586
70	180	100	7.970 271
90	180	100	9.045 850
110	180	100	6.242 670
125	180	100	9.045 851
150	180	100	9.045 852
185	180	100	6.242 669

1 Filter Papers, Grade 540, quantitative, round

- Acid-treated for high wet-strength
- Extremely low ash content (0.006 % ash maximum)
- Nominal particle retention of 8 µm
- Medium flow rate (Herzberg filtration speed 200 s)
- High chemical resistance to strong acid and alkali suspensions

Whatman

Diam. mm	PK	Cat. No.
24	100	6.241 936
42,5	100	7.622 636
55	100	9.056 480
90	100	9.056 482
110	100	9.056 483
125	100	9.056 484
150	100	9.056 485
185	100	9.056 486
240	100	9.056 487

1



2 Filter Papers, Grade 541, quantitative, round sheets

- High wet-strength
- High chemical resistance to strong acid and alkali suspensions
- Retention of gelatinous precipitate
- 22 µm nominal particle retention rating
- Fast flow rate (Herzberg filtration speed 34 s)
- Maximum of 0.006 % ash concentration

Whatman

Diam. mm	PK	Cat. No.
42,5	100	9.056 515
47	100	6.302 895
55	100	9.056 490
70	100	9.056 491
90	100	9.056 492
110	100	9.056 493
125	100	9.056 494
150	100	9.056 495
185	100	9.056 496
240	100	9.056 497
270	100	9.056 498
320	100	9.056 499
460 x 570	100	9.056 561

2



3 Quantitative filter paper, Grade 589/1, circles

Fast 12 to 25 µm
Black ribbon

- for coarse, high volume precipitates
- for determinations according to the German Standard Methods for the examination of water, waste water and sludge.
- most frequently used quantitative filter
- Weight: 80 g/m²
- Thickness: 0.19 mm

Whatman

Diam. mm	PK	Cat. No.
90	100	9.060 102
110	100	9.060 103
125	100	9.060 104
150	100	9.060 105
185	100	9.060 106

3



4 Quantitative filter paper, type MN 640 w, circles

Fast filtration, smooth, ashless.

MACHERY-NAGEL

Diam. mm	Filtration time secs.	PK	Cat. No.
55	9	100	9.046 200
70	9	100	9.046 201
90	9	100	9.046 202
110	9	100	9.046 203
125	9	100	9.046 204
150	9	100	9.046 205

4



Grey pack, equivalent grade to black band.

Filtration/Filter paper, quantitative

1

1 Quantitative filter paper, type MN 640 m, circles

Medium-fast, smooth, ashless.

MACHEREY-NAGEL

Diam. mm	Filtration time secs.	PK	Cat. No.
55	27	100	9.046 300
70	27	100	9.046 301
90	27	100	9.046 302
110	27	100	9.046 303
125	27	100	9.046 304
150	27	100	9.046 305

White pack, equivalent grade to white band.

2

2 Quantitative filter paper, Grade 589/2

Medium fast, 4 to 12 µm. White ribbon.

Whatman

- for the analysis of foodstuffs
- for carbonates of alkaline earth metals, $(\text{NH}_4)_2[\text{P}(\text{Mo}_3\text{O}_{10})_2] \times \text{aq.}$, $\text{Mg}(\text{NH}_4)\text{PO}_4$, CaC_2O_4 (hot precipitates)
- Weight: 85 g/m²
- Thickness: 0.18 mm

Diam. mm	Description	PK	Cat. No.
12.7	filter paper circles	1000	7.009 571
50.0	filter paper circles	100	7.079 006
55.0	filter paper circles	100	9.060 200
70.0	filter paper circles	100	9.060 201
90.0	filter paper circles	100	9.060 202
110.0	filter paper circles	100	9.060 203
125.0	filter paper circles	100	9.060 204
150.0	filter paper circles	100	9.060 205
185.0	filter paper circles	100	9.060 206
240.0	filter paper circles	100	9.060 207

3

3 Quantitative filter paper, Grade 589/3, circles

Slow < 2 µm. Blue ribbon.

Whatman

- for very fine precipitates and small particles
- for soil analysis
- for BaSO₄ (hot precipitate), PbSO₄, Cu₂O, ZnS, NiS
- Weight: 84 g/m²
- Thickness: 0.16 mm

Diam. mm	PK	Cat. No.
12.8	1000	7.009 579
110.0	100	9.060 303
125.0	100	9.060 304
150.0	100	9.060 305
185.0	100	9.060 306

4

4 Quantitative filter paper, grade 40

Circles. Quantitative. Ashless.

Whatman

- Flow rate: Medium
- Retention: Medium
- Wet strength: Low
- Thickness: 0.21 mm
- Ash: 0.007 %

Diam. mm	PK	Cat. No.
32	100	9.049 035
42.5	100	9.056 399
55	100	9.056 400
70	100	9.056 401
90	100	9.056 402
110	100	9.056 403
125	100	9.056 404
150	100	9.056 405
185	100	9.056 406
240	100	9.056 407

1 Quantitative filter paper, grade 41

Circles. Quantitative. Ashless. For filtration of coarse and gelatinous precipitates. Supplied in box of 100.

Whatman

Flow rate: Fast
Retention: Medium
Wet strength: Low
Thickness: 0.22 mm
Ash: 0.007 %

Diam. mm	PK	Cat. No.
55	100	9.056 410
60	100	9.049 045
70	100	9.056 411
90	100	9.056 412
110	100	9.056 413
125	100	9.056 414
150	100	9.056 415
185	100	9.056 416
240	100	9.056 417



2 Filter paper, grade 42

Circles. Quantitative. Ashless. For filtration of fine precipitates.

Whatman

Flow rate: Slow
Retention: High
Wet strength: Low
Thickness: 0.20 mm
Ash: 0.007 %

Diam. mm	PK	Cat. No.
42.5	100	9.056 419
55	100	9.056 420
70	100	9.056 421
90	100	9.056 422
110	100	9.056 423
125	100	9.056 424
150	100	9.056 425
185	100	9.056 426
240	100	9.056 427



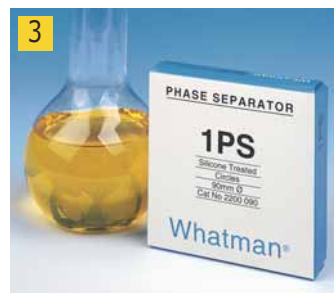
3 Phase separators, 1PS

A silicone impregnated, water repellent paper which can be used to separate aqueous solutions from immiscible solvents. The aqueous phase is retained and the organic phase passes through. Will retain solid particles. Can be used either flat under suction not exceeding 70 mm Hg or quadrant folded in a conical glass funnel. Supplied in box of 100 circles. Note: This paper contains a small quantity of tin complex catalyst. It is therefore not recommended for use when this complex may cause interference, e.g. with the use of dithizone (diphenylthiocarbazone) reagent.

Whatman

Flow rate: Fast
Retention: Medium
Wet strength: High
Thickness: 0.16 mm
Ash: 0.008 %

Diam. mm	PK	Cat. No.
70	100	9.056 891
90	100	9.056 892
110	100	9.056 893
125	100	9.056 894
150	100	9.056 895
185	100	9.056 896
240	100	9.056 897
270	100	9.056 898



Filtration/Filter paper, quantitative



1 Filter paper, quantitative, round filters

Ashless filters (approx. 0.004%), recommended for quantitative analysis, routine gravimetric tests and sample preparation for instrumental analysis.

Hahnemühle

- Acid-washed and rinsed with water to neutralise
- Free of minerals and metallic ions, ideal for the detection of metallic ions
- For analytical applications, routine quantitative and /or gravimetric procedures
- These filter papers are perfectly qualified for food control, beverage analysis and environmental monitoring

Type	Colour coding	Diam. mm	Weight g / m ²	Filtration time acc. to Herzberg s	Thickness mm	PK	Cat. No.
FP 589/1	black	47.0	79	50	0.19	100	4.006 441
FP 589/1	black	55.0	79	50	0.19	100	4.006 442
FP 589/1	black	70.0	79	50	0.19	100	4.006 443
FP 589/1	black	90.0	79	50	0.19	100	4.006 444
FP 589/1	black	110.0	79	50	0.19	100	4.006 445
FP 589/1	black	125.0	79	50	0.19	100	4.006 446
FP 589/1	black	150.0	79	50	0.19	100	4.006 447
FP 589/1	black	185.0	79	50	0.19	100	4.006 448
FP 589/1	black	240.0	79	50	0.19	100	4.006 449
FP 589/2	white	12.5	85	140	0.18	1000	4.006 450
FP 589/2	white	40.5	85	140	0.18	100	4.006 451
FP 589/2	white	47.0	85	140	0.18	100	4.006 452
FP 589/2	white	55.0	85	140	0.18	100	4.006 453
FP 589/2	white	70.0	85	140	0.18	100	4.006 454
FP 589/2	white	90.0	85	140	0.18	100	4.006 455
FP 589/2	white	110.0	85	140	0.18	100	4.006 456
FP 589/2	white	125.0	85	140	0.18	100	4.006 457
FP 589/2	white	150.0	85	140	0.18	100	4.006 458
FP 589/2	white	185.0	85	140	0.18	100	4.006 459
FP 589/3	blue	47.0	84	750*	0.16	100	4.006 461
FP 589/3	blue	55.0	84	750*	0.16	100	4.006 462
FP 589/3	blue	70.0	84	750*	0.16	100	4.006 463
FP 589/3	blue	90.0	84	750*	0.16	100	4.006 464
FP 589/3	blue	110.0	84	750*	0.16	100	4.006 465
FP 589/3	blue	125.0	84	750*	0.16	100	4.006 466
FP 589/3	blue	150.0	84	750*	0.16	100	4.006 467
FP 589/3	blue	185.0	84	750*	0.16	100	4.006 468
FP 589/3	blue	240.0	84	750*	0.16	100	4.006 469
FP 589/4	yellow	90.0	81	170	0.17	100	4.006 473
FP 589/4	yellow	110.0	81	170	0.17	100	4.006 474
FP 589/4	yellow	125.0	81	170	0.17	100	4.006 475
FP 589/4	yellow	150.0	81	170	0.17	100	4.006 476
FP 589/5	red	55.0	84	450	0.17	100	4.006 480
FP 589/5	red	70.0	84	450	0.17	100	4.006 481
FP 589/5	red	90.0	84	450	0.17	100	4.006 482
FP 589/5	red	110.0	84	450	0.17	100	4.006 483
FP 589/5	red	125.0	84	450	0.17	100	4.006 484
FP 589/5	red	150.0	84	450	0.17	100	4.006 485

*Measured with 100 mm water column instead of 50 mm



2 Filter paper, quantitative, Grade 388 - black spot, circles and sheets

Sartorius Lab Instruments

Properties: Rapid filtration, coarse porosity
 Filtration time: 6 to 14 secs.
 Surface weight: 84 g/m²

Diam. mm	PK	Cat. No.
55	100	9.049 500
70	100	9.049 501
90	100	9.049 502
110	100	9.049 503
125	100	9.049 504
150	100	9.049 505
185	100	9.049 571
240	100	9.049 572

Other formats and diameters are available on request.

6. Distillation, separation, filtration Filtration/Filter paper, quantitative

1 Quantitative filter paper, Grade 389 - white spot, circles and sheets

Sartorius Lab Instruments

Properties: medium speed filtration
Filtration time: 16 to 28 secs.
Surface weight: 84 g/m²

Diam. mm	PK	Cat. No.
55	100	9.049 510
70	100	9.049 511
90	100	9.049 512
110	100	9.049 513
125	100	9.049 514
150	100	9.049 515

Other formats and diameters are available on request.



2 Quantitative filter paper, Grade 391 - blue spot, circles and sheets

Sartorius Lab Instruments

Properties: very slow filtration
Filtration time: 150 to 250 secs.
Surface weight: 84 g/m²

Diam. mm	PK	Cat. No.
55	100	9.049 520
70	100	9.049 585
90	100	9.049 586
110	100	9.049 587
125	100	9.049 524
150	100	9.049 588
185	100	9.049 589
240	100	9.049 590
580 x 580	100	9.049 591

Other formats and diameters are available on request.



3 Filter paper, quantitative, Grade 392 - red spot, circles and sheets

Sartorius Lab Instruments

Properties: medium fast filtration
Filtration time: 35 to 70 secs.
Surface weight: 84 g/m²

Diam. mm	PK	Cat. No.
55	100	9.049 577
70	100	9.049 578
90	100	9.049 579
110	100	9.049 580
125	100	9.049 581
150	100	9.049 582
185	100	9.049 536
240	100	9.049 583
580 x 580	100	9.049 584

Other formats and diameters are available on request.



4 Filter paper grade 390, green dot, quantitative, round filter

Sartorius Lab Instruments

Slow filtration. These ashless filter papers are used for quantitative and gravimetric analyses as well as for pressure and vacuum filtration.

Diam. mm	Weight g / m ²	Filtration time secs.	PK	Cat. No.
47	84	100	100	6.239 206
55	84	100	100	7.300 360
70	84	100	100	7.300 358
90	84	100	100	7.079 463
100	84	100	100	7.079 766
110	84	100	100	7.079 472
125	84	100	100	7.079 380
150	84	100	100	7.077 523
185	84	100	100	6.206 309

