

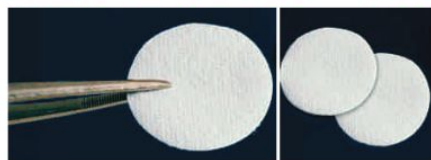


HOUSE OF FILTER PAPERS

Trusted Filtration - Proven Performance



Glass Microfiber Filters



Syringe Filters



Thimbles



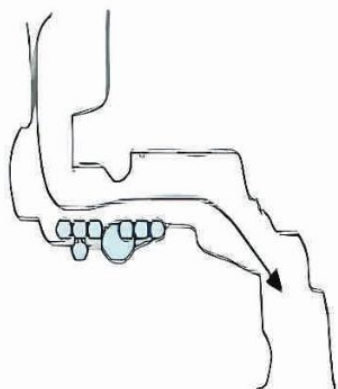
INTRODUCTION

We are trusted manufacturers of high-quality Laboratory Filter Media, designed to deliver accurate and reliable filtration solutions for research, industrial, and medical applications. With advanced production techniques and stringent quality control, our filter media ensures precision, consistency, and durability. We offer a wide range of customized filtration products tailored to meet diverse laboratory needs. Committed to innovation and excellence, we support industries in achieving the highest standards of purity and performance.

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INTRODUCTION OF FILTRATION MECHANISM



Depth retention

Refers to mechanism of retention produced inside. Some of the most important processes are as under:-

Electrostatic absorption

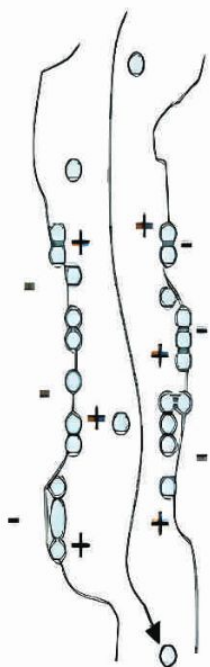
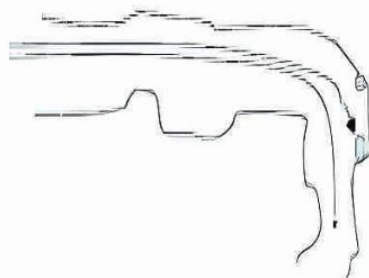
According to the porosity of the filter fibers and of the particles that must go through it, which makes these particles adhere to the fiber walls and particles smaller than the size indicated in the specifications of the filter are retained.

Effects of inertia

Some particle will literally remain stuck inside the network of fibers due to the high kinetic energy with which they penetrate the pores of the frame.

Sedimentation

The particles can be captured by the filter network and deposited by gravity in somewhere of the interior space formed by the fibers.



In any case, the efficiency of retention of a filter paper is also determined by the other factors related to the liquid, which can be pH value, the viscosity and concentrations of the liquid to be filtered as well as the form and composition of the particles in suspension in it.

Other causes or properties of the filter also affect the efficiency of retention: level of refinement of the cellulose fibers, resistance to the moist state of the filter, thickness, nature of the surface, etc.

So due to the extremely complex mechanisms on which filtration depends, it is sometimes impossible to theoretically determine the most adequate filter for filtrations. It is at this moment when, in the case of difficult filtration, it is essential to do some comparative testing of filtration between various samples of filter paper according to the parameters of retention that we need.



TECHNICAL PARAMETERS OF FILTER PAPERS

01. BASIS WEIGHT (GRAMMAGE)

Unit of Measurement : g/m^2

Expresses the weight in grams of a square meter of manufactured paper.

Standard applied: UNE-EN-ISO 536:1995 according to which a sample of paper between 500 and 1000 mm is weighed on precision scale with a margin of error of 0.5%. Later, the area is calculated and the weight in grams is determined. $g = (m/A) \times 10.000$ where: m is the mass of the sample in g & A is the area of the sample in cm^2

02. THICKNESS

Unit of measurement : mm.

It is the distance between both faces of the paper Standard applied: UNE-EN 20534 ISO 534:1988.

To determine this parameter, micrometer is used to test static load

03. ASH CONTENT

Unit of measurement : %

Calculated from the difference of weight between the calcination residue obtained with a muffle at 800°C in a platinum or porcelain crucible and the 10 grams sample of filter paper completely free of moisture according to the calculation.

Standard applied: UNE 57019

04. PORE SIZE

Standard applied : μm .

The pore is calculated by the medium valued obtained with a pore measurer.

It is a parameter used in filter paper

05. KLEMM METHOD (CAPILLARY RISE OF THE WATER)

Unit of measurement : mm/10min.

The capillary rise according to Klemm indicates how far a strip of filter paper is moistened in 10 min when vertically dipped with one end into distilled water (20°C).

06. PARTICLE RETENTION

Unit of measurement : μm .

Corresponds to the lower measurement of the size of the particles stopped by the filter.

This parameter is very much used in filters with considerable capacity for depth retention of particles by various physical and chemical means (glass and quartz micro fiber most of all).

particle retention refers to the efficiency of filter papers in retaining certain precipitates. It is characterised by the

permeability of the paper for precipitates of iron

(III) oxyhydrate, lead sulphate, calcium oxalate and barium sulphate.



TECHNICAL PARAMETERS OF FILTER PAPERS

07. DRY BURSTING STRENGTH

For determination of the dry bursting strength the paper is clamped over a rubber diaphragm with an area of 10 cm². The strain on the paper is then increased by applying an increasing air pressure, until the paper bursts.

The dry bursting strength is measured accordance with DIN 53113 is stated in Kpa.

08. TENSILE STRENGTH

For determination of the tensile strength a paper strip (measuring 180x15 mm) is subjected to vertical strain by applying increasing weight. The force expanded at the moment of tearing represents the tensile strength.

Results are expressed in N/15 mm.

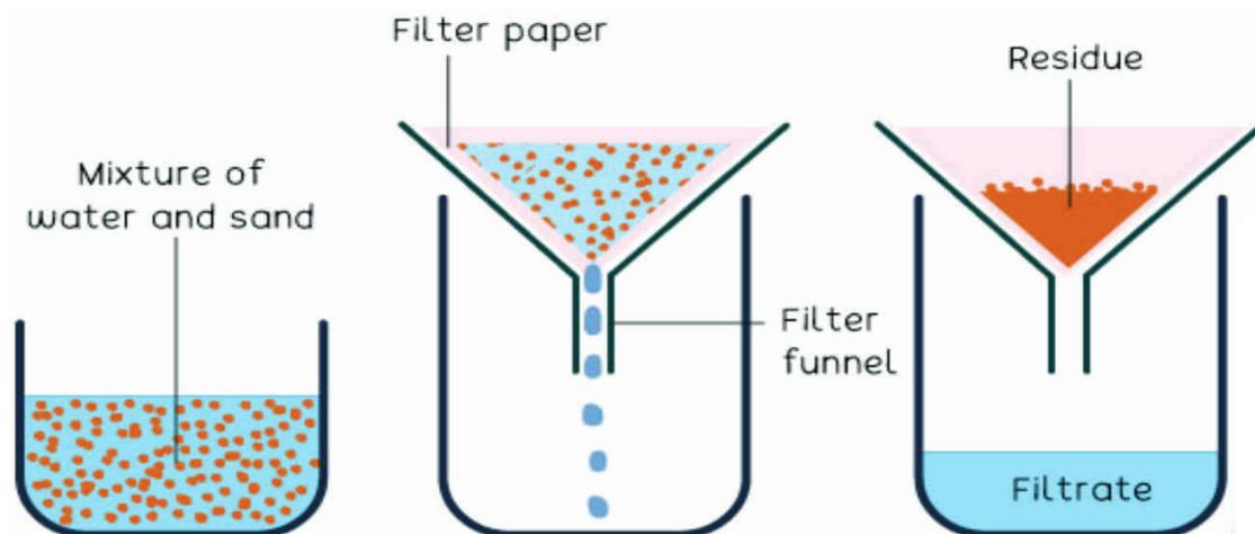
09. FILTRATION SPEED

For determination of the filtration speed in accordance with DIN 53137, the duration of flow of 10 ml distilled water through a quadrant-folded, freely suspended filter circle of 12.5 cm diameter is measured. Results are expressed in seconds.

10. WET STRENGTH

The wet strength of a paper is a measure for the mechanical stability of a paper in a wet or moist condition.

For example, it can be determined as the tensile strength or the bursting strength (see above).



GENERAL PROPERTIES OF FILTER PAPERS

Grade	Ref. Grade	Pore Size	Filtration Speed	Initial Filtration Speed (Secs/100 ml) Herzberg Method	Ash %	Grammage gr/m ²	Thickness mm	Particle Retention (Liquid) (µm)
Economy Grade Filter Papers								
001	1	11 µm	Medium	145-160	≤ 0.08	85-90	0.18	11
Qualitative Filter Papers								
101	1	11 µm	Medium	145-160	≤ 0.08	87-90	0.18	11
102	2	8 µm	Medium Slow	230-250	≤ 0.08	97-100	0.20	8
103	3	6 µm	Medium Slow	320-340	≤ 0.08	180-190	0.39	6
104	4	22 µm	Fast	35-40	≤ 0.08	90-95	0.20	22
Quantitative Filter Paper-ashless grades								
440	40	8 µm	Medium Slow	325-350	≤ 0.007	88-92	0.18	8
441	41	22 µm	Fast	50-55	≤ 0.007	84-86	0.21	22
442	42	2.5 µm	Very Slow	1850-1900	≤ 0.007	98-100	0.19	2.5
443	43	16 µm	Medium Fast	150-160	≤ 0.007	95-97	0.22	16
Glass Microfiber Filters - without Binder								
GFA	GF/A	1.6 µm	67	67	NA	53	0.220	1.6
GFB	GF/B	1.0 µm	190	190	NA	127	0.500	1.0
GFC	GF/C	1.2 µm	112	112	NA	51	0.280	1.2
GFD	GF/D	2.7 µm	42	42	NA	143	0.800	2.7
GFF	GF/F	0.7 µm	163	163	NA	75	0.550	0.7
EPM 2000	EPM 2000	2.0 µm	NA	NA	NA	80	0.45	2.0
GFAH 6	934 - AH	1.5 µm	47	47	NA	64	0.33	1.5



ECONOMY GRADE FILTER PAPERS

Suitable for Schools, Colleges, Industrial Purpose & for General Test Applications

Type	Grade	Ref. Grade	Code	Size in mm	Circles/Sheets Per Pack
Economy Grade	001	1	001-90	90	100
Economy Grade	001	1	001-110	110	100
Economy Grade	001	1	001-125	125	100
Economy Grade	001	1	001-150	150	100
Economy Grade	001	1	001-185	185	100
Economy Grade	001	1	001-240	240	100
Economy Grade	001	1	001-SH1	460x570	100
Economy Grade	001	1	001-SH5	460x570	500



QUALITATIVE FILTER PAPERS

(Recommended for Qualitative analysis with high level precision)

These cellulose filters are used in qualitative techniques to determine and identify materials.

Code 101 (Ref. Grade - 1)

Qualitative filter paper with (Medium Speed) are used filter paper for routine applications with medium retention and flow rate. This grade covers a wide range of laboratory applications and is frequently used for clarifying liquids.

- In agriculture, it is used for soil analysis and seed testing procedures.
- In the food industry, Grade 1 is used for numerous routine techniques to separate solid foodstuffs from associated liquid, or extracting liquid and is widely used in education for teaching simple qualitative analytical separations.

Code 102 (Ref. Grade - 2)

Qualitative filter paper with (Medium Slow) speed slightly more retentive and absorbent than Grade1, with a corresponding increase in filtration time.

Code 103 (Ref. Grade - 3)

Qualitative filter paper with (Medium Slow) speed double the thickness of Grade 1, with still finer particle retention and excellent loading capacity.

- The extra thickness given increased wet strength and makes this grade highly suitable for use in Büchner funnels.

Code 104 (Ref. Grade - 4)

Qualitative filter paper with (Fast) filtration speed excellent retention of coarse particles and gelatinous precipitates such as ferric hydroxide and aluminum hydroxide.

- Very useful as a rapid filter for routine clean-up of biological fluids or organic extracts during analysis.

Code 105 (Ref. Grade - 5)

Qualitative filter paper with (Very Slow) filtration speed maximum degree of fine particle filtration in the qualitative range.

- Excellent clarifying filter for cloudy suspensions and for water and soil analysis.



QUALITATIVE FILTER PAPERS

Type	Grade	Ref. Grade	Code	Size in mm	Circles/Sheets Per Pack
Qualitative	101	1	101-25	25	400
Qualitative	101	1	101-55	55	100
Qualitative	101	1	101-70	70	100
Qualitative	101	1	101-90	90	100
Qualitative	101	1	101-110	110	100
Qualitative	101	1	101-125	125	100
Qualitative	101	1	101-150	150	100
Qualitative	101	1	101-185	185	100
Qualitative	101	1	101-240	240	100
Qualitative	101	1	101-320	320	100
Qualitative	101	1	101-SH1	460x570	100
Qualitative	101	1	101-SH5	460x570	500
Qualitative	102	2	102-70	70	100
Qualitative Petroleum	102	2	102-90	90	100
Qualitative	102	2	102-110	110	100
Qualitative	102	2	102-125	125	100
Qualitative	102	2	102-150	150	100
Qualitative	102	2	102-SH1	460x570	100
Qualitative	103	3	103-70	70	100
Qualitative	103	3	103-90	90	100
Qualitative	103	3	103-110	110	100
Qualitative	103	3	103-125	125	100
Qualitative	103	3	103-150	150	100
Qualitative	103	3	103-SH1	460x570	100
Qualitative	104	4	104-55	55	100
Qualitative	104	4	104-70	70	100
Qualitative	104	4	104-90	90	100
Qualitative	104	4	104-110	110	100
Qualitative	104	4	104-125	125	100
Qualitative	104	4	104-150	150	100
Qualitative	104	4	104-185	185	100
Qualitative	104	4	104-240	240	100
Qualitative	104	4	104-320	320	100
Qualitative	104	4	104-SH1	460x570	100
Qualitative	105	5	105-110	110	100
Qualitative	105	5	105-125	125	100

ASHLESS FILTER PAPERS

Ashless filters are designed for gravimetric analysis and the preparation of samples for instrument analysis.

Code 440 (Ref. Grade - 40)

Ashless filter paper with Medium Speed and retention are suitable for gravimetric analysis for numerous components in cements, clays, iron, and steel products, as a primary filter for separation solid matter from aqueous extracts in general soil analysis, quantitative determination of sediments in milk.

Code 441 (Ref. Grade - 41)

Ashless filter paper with Fast Speed recommended for analytical procedures involving coarse particles or gelatinous precipitates (e.g. iron or aluminum hydroxides).

Also used in quantitative air pollution analysis as a paper tape for impregnation when determining gaseous compounds at high flow rates.

Code 442 (Ref. Grade - 42)

Ashless filter paper with Slow Speed are used for critical gravimetric analysis with the finest particle retention also for typical analytical precipitates include barium sulfate, metastannic acid, and finely precipitated calcium carbonate.

Code 443 (Ref. Grade - 43)

Ashless filter paper with Medium Fast Speed are used for typical applications include foodstuffs analysis, soil analysis, particle collection in air pollution monitoring for subsequent analysis by XRF techniques, and inorganic analysis in the construction, mining, and steel industries.

Code 444 (Ref. Grade - 44)

Ashless filter paper with Slow Speed are used thin version of grade 42 retaining very fine particles but with lower ash weight sample and almost twice the flow rate.



ASHLESS FILTER PAPERS

Type	Grade	Ref. Grade	Code	Size in mm	Circles/Sheets Per Pack
Ashless	440	40	440-12.7	12.7	400
Ashless	440	40	440-70	70	400
Ashless	440	40	440-90	90	100
Ashless	440	40	440-110	110	100
Ashless	440	40	440-125	125	100
Ashless	440	40	440-150	150	100
Ashless	440	40	440-185	185	100
Ashless	440	40	440-240	240	100
Ashless	440	40	440-SH1	460x570	100
Ashless	441	41	441-70	70	100
Ashless	441	41	441-90	90	100
Ashless	441	41	441-110	110	100
Ashless	441	41	441-125	125	100
Ashless	441	41	441-150	150	100
Ashless	441	41	441-185	185	100
Ashless	441	41	441-SH1	460x570	100
Ashless	442	42	442-55	55	100
Ashless	442	42	442-70	70	100
Ashless	442	42	442-90	90	100
Ashless	442	42	442-110	110	100
Ashless	442	42	442-125	125	100
Ashless	442	42	442-150	150	100
Ashless	442	42	442-185	185	100
Ashless	442	42	442-240	240	100
Ashless	442	42	442-320	320	100
Ashless	442	42	442-SH1	460x570	100
Ashless	443	43	443-90	90	100
Ashless	443	43	443-110	110	100
Ashless	443	43	443-125	125	100
Ashless	443	43	443-150	150	100
Ashless	443	43	443-SH1	460x570	100

ASHLESS CLIPPING

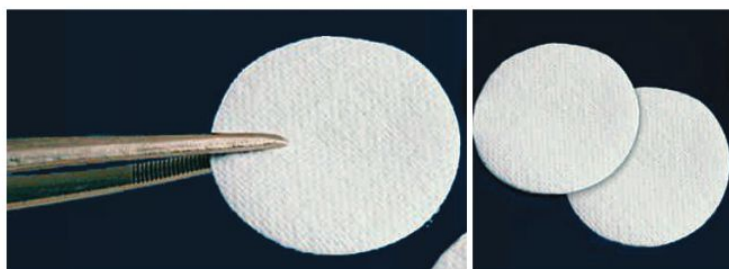
Type	Code	Weight
Ashless Clipping	ASC-500	500 Grams



GLASS MICROFIBER FILTERS (Without Binders)

Product Specifications

Types of Glass Fiber Filters					
Specifications	GFA	GFB	GFC	GFD	GFF
Filtration Rating	1.6 μm	1 μm	1.2 μm	2.7 μm	0.7 μm
Material	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass
Binder	Binder Free	Binder Free	Binder Free	Binder Free	Binder Free
Temperature	500°C	500°C	500°C	500°C	500°C
GSM (g/m ²)	53 $\pm$ 2	127 $\pm$ 2	51 $\pm$ 2	143 $\pm$ 2	75 $\pm$ 2
Typical Thickness	220 $\pm$ 10 μm	500 $\pm$ 10 μm	280 $\pm$ 10 μm	800 $\pm$ 10 μm	550 $\pm$ 10 μm
Filtration Speed (Herzberg)	67 sec	190 sec	112 sec	42 sec	163 sec
Wetting Time	$\leq$ 2 sec	$\leq$ 2 sec	$\leq$ 2 sec	$\leq$ 2 sec	$\leq$ 2 sec
Wettability	Fast Wet	Fast Wet	Fast Wet	Fast Wet	Fast Wet
Tensile Strength (Dry)	9 psi	18 psi	9 psi	18 psi	22 psi
Tensile Strength (Wet)	6 psi	14 psi	6 psi	10 psi	12 psi
Wet Strength	0.66	0.77	0.66	0.55	0.54
Capillary Rise (mm/min)	53 mm	48 mm	58 mm	89 mm	55 mm
DOP Retention	99.97%	99.97%	99.97%	99.97%	99.97%
Change in appearance	No crack or hole is observed when it is folded.				



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GLASS MICROFIBER FILTERS (Without Binders)

(Recommended in analysis of air and water according to international standards)

Molychem Glass micro fiber filter are primarily available in 6 grades.



Code GFA (Ref. Grade - GF/A)

Filters for pollution monitoring this grade filter paper offers fine particle retention and high flow rate, as well as good loading capacity.

- Used for high-efficiency general purpose laboratory filtration, including water pollution monitoring of effluents, for filtration of water, along and bacteria cultures, food stuff analyses, protein filtration, and radioimmunoassay of weak B emitters.
- Recommended for gravimetric determination of airborne particulates, stack sampling, and absorption methods of air pollution monitoring.

Code GFB (Ref. Grade - GF/B)

Three times thicker than GF/A with higher wet strength and significantly increased loading capacity. Combines fine particle retention with good flow rate. Particularly useful where liquid clarification or solids quantification is required for heavily-loaded, fine particulate suspensions. Can be used as a finely retention membrane prefilter.

Code GFC (Ref. Grade - GF/C)

Combines fine particle retention with good flow rate. Fast and efficient clarification of aqueous liquids containing low to medium levels of fine particulates. Widely used for cell harvesting, liquid scintillation counting, and binding assays where more loading capacity is required.

Code GFD (Ref. Grade - GF/D)

Considerably faster in flow rate and overall filtration speed than cellulose filter papers of similar particle retention. The filter is thick and consequently exhibits a high loading capacity.

- GF/D will provide good protection for finely retentive membranes.
- Can be used in combination with GF/B to provide very efficient grades prefilter protection for membranes.

Code GFF (Ref. Grade - GF/F)

This high-efficiency filter will retain fine particles down to 0.7 µm. Recommended for nucleic acid binding and purification. Very effective in filtering finely precipitated proteins, GF/F can be used in conjunction with GF/D as a prefilter for the successful clarification of extremely difficult biochemical solution and fluids, and nucleic acids.

Code GFFAH 6 (Ref. Grade - 934-AH)

This is a smooth surface, high retention borosilicate glass microfiber filter, which has been pre-fired and withstands temperatures over 550°C. Grade 934-AH is used for a wide range of laboratory applications.

- Used for determining total suspended solids in water, removal of turbidity, and filtration of bacterial cultures.
- Recommended for water pollution monitoring, cell harvesting, liquid scintillation counting, and air pollution monitoring.

Code EPM 2000 (Ref. Grade-EPM2000)

It is manufactured from 100% pure borosilicate glass of special purity, and pre-fired to enable the detailed chemical analysis of trace pollutants with the minimum of interference or background.

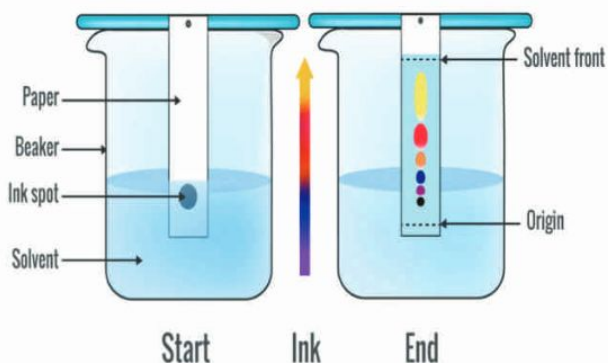


GLASS MICROFIBER FILTERS (Without Binders)

Grade	Ref. Grade	Code	Size in mm	Circles/Sheets Per Pack
GFA	GF/A	GFA203	203 x 254	100
GFA	GF/A	GFA25	25	100
GFA	GF/A	GFA37	37	100
GFA	GF/A	GFA47	47	100
GFA	GF/A	GFA55	55	100
GFA	GF/A	GFA70	70	100
GFA	GF/A	GFA90	90	100
GFA	GF/A	GFASH1	SH1	100
GFB	GF/B	GFB25	25	100
GFB	GF/B	GFB37	37	100
GFB	GF/B	GFB47	47	100
GFB	GF/B	GFB90	90	100
GFC	GF/C	GFC25	25	100
GFC	GF/C	GFC37	37	100
GFC	GF/C	GFC47	47	100
GFC	GF/C	GFC55	55	100
GFC	GF/C	GFC70	70	100
GFC	GF/C	GFC90	90	100
GFC	GF/C	GFC110	110	100
GFC	GF/C	GFC125	125	100
GFC	GF/C	GFC150	150	100
GFD	GF/D	GFD25	25	100
GFD	GF/D	GFD37	37	100
GFD	GF/D	GFD47	47	100
GFD	GF/D	GFD70	70	100
GFD	GF/D	GFD90	90	100
GFF	GF/F	GFF25	25	100
GFF	GF/F	GFF37	37	100
GFF	GF/F	GFF47	47	100
GFF	GF/F	GFF70	70	100
GFF	GF/F	GFF90	90	100
EPM2000	EPM2000	EPM 2000-203	203 x 254	100
GFFAH 6	934-AH	GFFAH 6-42.5	42.5	100
GFFAH 6	934-AH	GFFAH 6-47	47	100
GFFAH 6	GF/A	GFFAH 6-55	55	100
GFFAH 6	GF/A	GFFAH 6-70	70	100
GFFAH 6	GF/A	GFFAH 6-125	125	100

CHROMATOGRAPHY PAPERS

(Specially made as a holder in an enormous type of chromatography)



DESCRIPTION

Molychem chromatography papers are made from pure cotton linters with an alpha cellulose content of 98% to ensure a low ash content and the virtual absence of metal contaminants.

Primary application is in the chromatography and electrophoresis.

The most important parameters that indicate the characteristics of the chromatographic papers are weight in grams, thickness and the speed of aspiration

Molychem chromatography papers are primarily available in 5 grades.

CODE CHR01 (Reference Grade 1 CHR)

FINE, MEDIUM ASPIRATION

- * General chromatography works.
- * Determination of the presence of malic acid in wine.
- * Practices in high school and university labs.

CODE CHR02 (Reference Grade 2 CHR)

FINE, MEDIUM ASPIRATION

- * General chromatography works.
- * Determination of components by elution.

CODE CHR03 (Reference Grade 3 CHR)

MEDIUM, MEDIUM ASPIRATION

- * Separation of organic compounds.
- * Electrophoresis works.
- * Chromatography with a high charge of solutes.
- * Separation and identification of additives in food.

CODE CHR17 (Reference Grade 17 CHR)

THICK, MEDIUM ASPIRATION

- * Electrophoresis with big molecular compounds.
- * Analysis of proteins in serums.

CODE CHR20 (Reference Grade 20 CHR)

VERY THICK, QUICK ASPIRATION

- * Electrophoresis with big molecular compounds.

TECHNICAL SPECIFICATIONS

Code	Ref. Grade	Basis weight gr/m ²	Thickness (mm)	Speed of aspiration mm/30 min
CHR01	1 CHR	90	0.18	90-100
CHR02	2 CHR	140	0.28	90-100
CHR03	3 CHR	180	0.36	90-100
CHR17	17 CHR	270	0.70	130-140
CHR20	20 CHR	650	1.70	100-120

Code	Ref. Grade	Size in mm	No of sheets per pack
CHR01	1 CHR	460x570	100
CHR03	3 CHR	460x570	100



CELLULOSE EXTRACTION THIMBLES

(Separation of compose made of solid material in extractors)

PRODUCT DESCRIPTION

Molychem Cellulose extraction thimbles are known for their purity and consistent high quality. Cellulose extraction thimbles are made from high alpha cellulose and have excellent mechanical strength and retention. We offer you thimbles with very accurate dimensions, that is matched exactly to those of the thimble holders to ensure optimum fit.

APPLICATIONS

These thimbles are widely used in Soxhlet extraction units and provide a safe, convenient and efficient method of solvent extraction of semi-solids and solids. Soxhlet extraction is a technique widely used for analysis of fats pesticides in food and soil materials and in many other procedures that involve solid- liquid extraction. Suitable for use in automatic extraction systems and Air monitoring especially in cold stack air monitoring. Extraction and quantification of components in industrial products: Paint, Animal fat, cosmetics, pavements, varnishes, lacquers etc.

TECHNICAL SPECIFICATIONS

Tolerances Internal Diameter : ± 0.5 mm
External Height : ± 1 mm Wall
Thickness : 1.5mm ± 0.5 mm
Ash Content : < 0.1 %



Code	Grade Ref.	Size in mm	No of pieces per pack
METH1990	603	19X90	025
METH2660	603	26X90	025
METH2280	603	22X80	025
METH2580	603	25X80	025
METH2880	603	28X80	025
METH3080	603	30X80	025
METH3380	603	33X80	025
METH25100	603	25X100	025
METH28100	603	28X100	025
METH30100	603	30X100	025
METH30118	603	30X118	025
METH33118	603	33X118	025
METH35150	603	35X150	025
METH43123	603	43X123	025



GLASS FIBER EXTRACTION THIMBLES

PRODUCT DESCRIPTION

Molychem Glass micro fiber thimbles are made from high purity Borosilicate glass fibers. They are completely free from binders and additives hence can be used upto a temperature of 500 degree centigrade. We offer you thimbles with very accurate dimensions, they fit standard soxhlet extractors.

APPLICATIONS

These thimbles are widely used in Solvent extractions when the solvent is incompatible with cellulose thimbles. One of its major use is in stack monitoring because of its retention of 0.7 micron. Its typical thickness is 2.0mm.

TECHNICAL SPECIFICATIONS

Tolerances

Internal Diameter : +0/-0.5mm

External Height : +/- 1mm Wall Thickness : 2mm +/- 0.5mm

Penetration : < 0.002 % DOP

Max. Temp : 500 Degree Centigrade

Code	Grade Ref.	Size in mm	No of pieces per pack	Price per pack (₹)
MGT1990	603	19X90	025	14850

SEED GERMINATION PAPERS

Molychem seed testing papers have the characteristics required for germination substrate paper as follows:-

(A) Papers are made from pure cellulose and are sufficiently strong for the test and do not contain any substances which could influence the growth of seeds.

(B) These absorption papers store enough humidity for the entire test period.

(C) Their pH value is between 6.0 and 7.5

Colour : Brown

GSM : 135g/m²

Wet Strength : Normal

Surface : Creped



Code	Grade Ref.	Size In (Inch)	Per Pack in Kg.
SGP 1218	SGP	12 x 18	10

SYRINGE FILTERS



Ø 13mm Ø 25mm Ø 33mm

Pore Size : 0.2µm 0.45µm

**NYLON
SYRINGE FILTERS**



**PTFE
SYRINGE FILTERS**



**PVDF
SYRINGE FILTERS**



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SYRINGE FILTERS

Chart below shows the Chemical Compatibility of various types of syringe filters with some commonly used chemicals. All types membrane filter products were exposed to specified chemicals/reagents for 3 days at 25°C. Upshot: All products retain its Integrity after Chemical compatibility Test.

o = Recommended X = Not Recommended

* = Limited resistance - = No Data Available

SYRINGE FILTER CHEMICAL COMPATIBILITY CHART

Chemical		Cellulose acetate with PP Housing	Hydrophilic PVDF with PP Housing	Hydrophobic PTFE with PP Housing	Nylon with PP Housing
ACID	3 kmol/m ³ Hydrochloric acid (10%, 3N)	*	0	0	*
	9 kmol/m ³ Hydrochloric acid (30%, 9N)	x	0	0	x
	kmol/m ³ Sulfuric acid (5%, 2N)	0	0	0	*
	4 kmol/m ³ Sulfuric acid (20%, 8N)	x	0	0	x
	1 kmol/m ³ Nitric acid (5%, 1N)	*	0	0	*
	5 kmol/m ³ Nitric acid (20%, 5N)	x	*	*	x
	20% Acetic acid	0	0	0	0
	Glacial acetic acid	x	0	0	x
ACID	10% Hydrofluoric acid	x	0	0	x
	35% Hydrofluoric acid	x	0	0	x
	10% Chromic acid	*	*	*	*
	10% Phosphoric acid	0	0	0	*
ALKALIS	2.5 Kmol/m ³ Sodium hydroxide (10%, 2.5N)	x	0	0	x
	2 Kmol/m ³ Potassium hydroxide (10%, 2N)	x	0	0	0
	8 Kmol/m ³ Aqueous ammonia (28%, 2N)	*	0	0	0
ALCOHOLS	Methyl alcohol	0	0	0	0
	Ethyl alcohol	0	0	0	0
	n-Propyl alcohol	0	0	0	0
	Isopropyl alcohol	0	0	0	0
	n-Butyl alcohol	0	0	0	0
	Amyl alcohol	0	0	0	0
	Benzyl alcohol	x	0	0	0
	Ethylene glycol	0	0	0	0
	glycerol	0	0	0	0
ETHERS	Ethyl ether	*	*	*	0
	Isopropyl ether	0	0	0	-
	Tetrahydrofuran(THF)	x	*	*	*
	Dioxane	x	*	*	0
ESTERS	Methyl acetate	x	*	*	0
	Ethyl acetate	x	*	*	-
	Butyl acetate	x	*	*	x
	Amyl acetate	*	*	*	-
KETONES	Acetone	x	0	0	0
	Methyl ethyl ketone (IMEK)	x	*	*	0
	Methyl isobutyl ketone (MIBK)	x	*	*	0
	Cyclohexanone	x	*	*	0
HYDROCARBONS	Benzene	*	*	*	*
	Toluene	*	*	*	*
	Xylene	*	*	*	*
	n-Hexane	*	*	*	0
	n-Gasoline	0	0	0	0
	Kerosene	*	*	*	0



SYRINGE FILTERS

Product Description Characteristics and Applications	Product Code	Size in MM	Pore size μm	No of Pcs. (Per pack)
NYLON (NY) SYRINGE FILTERS - Naturally hydrophilic, low extractable. - High protein binding capacity. - Strength and dimensional stability. - Sterilisation, clarification of aqueous and organic solvent solution.	Non Sterile			
	NYSF 1302	13	0.2	100
	NYSF 1345	13	0.45	100
	NYSF 2502	25	0.2	100
	NYSF 2545	25	0.45	100
	NYSF 3302	33	0.2	50
	NYSF 3345	33	0.45	50
	Sterile			
	NYSFI 2545	25	0.45	50
CELLULOSE ACETATE (CA) SYRINGE FILTERS - Hydrophilic, Low Protein binding. - Uniform pore structure, consist flow rate. - Superior Strength and stability - Cell culture and Tissue culture media Sterilisation. - Protein & enzyme Filtration. - Biological Fluid Filtration Sterilisation.	Non Sterile			
	CASF 1302	13	0.2	100
	CASF 1345	13	0.45	100
	CASF 2502	25	0.2	100
	CASF 2545	25	0.45	100
	Sterile			
	CASFI 2502	25	0.2	50
	CASFI 3302	33	0.2	50
	CASFI 3345	33	0.45	50
PVDF SYRINGE FILTERS - Hydrophilic, high binding Capacity. - Uniform pore structure, for selectivity. - Consistent High flow rate. - Sterilisation & Clarifying filtration organic Solutions. - Analytical sample Preparations. - Chromatography.	Non Sterile			
	PVDFSF 1302	13	0.2	100
	PVDFSF 1345	13	0.45	100
	PVDFSF 2502	25	0.2	100
	PVDFSF 2545	25	0.45	100
	Sterile			
	PVDFSFI 2502	25	0.2	50
	PVDFSFI2545	25	0.45	50
HYDROPHOBIC PTFE SYRINGE FILTERS - Naturally & hydrophobic. - Compatible with strong acids and aggressive solutions. - Improved durability & handling. - Filtration of strong acids & aggressive solutions. - Venting application. - Phase separation & Aerosol sampling.	Non Sterile			
	PTFEHBSF 1302	13	0.2	100
	PTFEHBSF 1345	13	0.45	100
	PTFEHBSF 2502	25	0.2	100
	PTFEHBSF 2545	25	0.45	100
	Sterile			
	PTFEHBSFI 2502	25	0.2	50
	PTFEHBSFI 2545	25	0.45	50

SYRINGE FILTERS

Product Description Characteristics and Applications	Product Code	Size in MM	Pore size µm	No of Pcs. (Per pack)
HYDROPHILIC PTFE SYRINGE FILTERS • High Run Flow • Excellent Physical Resistance	Non Sterile			
	PTFEHLSF 1302	13	0.2	100
	PTFEHLSF 1302	13	0.45	100
	PTFEHLSF 2502	25	0.2	100
	PTFEHLSF 2545	25	0.45	100
HYDROPHILIC PTFE SYRINGE FILTERS • Filtration of Samples of Aggressive Samples, Acids & Bases.	Sterile			
	PTFESHLEFI 3302	33	0.2	50
	PTFESHLEFI 3345	33	0.45	50
PES SYRINGE FILTERS • High Velocity of Filtration. • Low level of Extractable.	Non Sterile			
	PESSF 2502	25	0.2	100
	PESSF 2545	25	0.45	100
	PESSF 3302	33	0.2	50
	PESSF 3345	33	0.45	50
	PESSF 3380	33	0.80	50
	Sterile			
	PESSFI 1302	13	0.2	100
	PESSFI 1345	13	0.45	100
	PESSFI 2502	25	0.2	50
	PESSFI 2545	25	0.45	50
GLASS FIBER SYRINGE FILTERS • High retention efficiency of 99%. Useful for relatively dirty solutions are to be clarified or for pre-filtration. • For high throughput. sample cleaning. particle removal. • Can be used along or in series with another Filtros UK glass fiber syringe filters.	Non Sterile			
	GFSY 1310	13	1.0	100
	GFSY 2510	25	1.0	100
	GFSY 3310	33	1.0	100
	GFSY 2545	25	0.45	100

DOUBLE LAYERED SYRINGE FILTER (DL) - NON STERILE

Product Description

- Syringe filters with pre-filter (glass fiber filter) enhance the throughput rate by retention of particle > 2.0 micron size at pre filtration stage.
- Syringe filters with pre-filter (glass fiber filter) are suitable for highly turbid or milky solutions.
- They are widely applicable for filtration of colloidal solutions.
- Also used in the filtration of typical filter solution (viscous solutions)

DOUBLE LAYERED SYRINGE FILTER NYLON

Code	Size In (mm)	Pore Size	Glass Fiber Rating	Circles/Sheets Per Pack
GFNYSF 1302	13	0.2 µm	1.00 µm	100
GFNYSF 1345	13	0.45 µm	1.00 µm	100
GFNYSF 2502	25	0.2 µm	1.00 µm	100
GFNYSF 2545	25	0.45 µm	1.00 µm	100

DOUBLE LAYERED SYRINGE FILTER PVDF

Code	Size In (mm)	Pore Size	Glass Fiber Rating	Circles/Sheets Per Pack
GFPVDFSF 1302	13	0.2 µm	1.00 µm	100
GFPVDFSF 1345	13	0.45 µm	1.00 µm	100
GFPVDFSF 2502	25	0.2 µm	1.00 µm	100
GFPVDFSF 2545	25	0.45 µm	1.00 µm	100

DOUBLE LAYERED SYRINGE FILTER PES

Code	Size In (mm)	Pore Size	Glass Fiber Rating	Circles/Sheets Per Pack
GFPESSF 1302	13	0.2 µm	1.00 µm	100
GFPESSF 1345	13	0.45 µm	1.00 µm	100
GFPESSF 2502	25	0.2 µm	1.00 µm	100
GFPESSF 2545	25	0.45 µm	1.00 µm	100

DOUBLE LAYERED SYRINGE FILTER PTFE (Hydrophobic)

Code	Size In (mm)	Pore Size	Glass Fiber Rating	Circles/Sheets Per Pack
GFPTFESF 1302	13	0.2 µm	1.00 µm	100
GFPTFESF 1345	13	0.45 µm	1.00 µm	100
GFPTFESF 2502	25	0.2 µm	1.00 µm	100
GFPTFESF 2545	25	0.45 µm	1.00 µm	100



MEMBRANE FILTERS

Description

Membrane Filter or membrane are microporous films with specific filtration rating. Membrane retains particles and micro organisms that exceed their filtration rating by acting as a physical barrier and capturing such particles on the surface of membrane. Filtros UK membranes are available in variety of media, filtration sizes, diameters, and surface types. Most membrane can be sterilized by autoclaving.

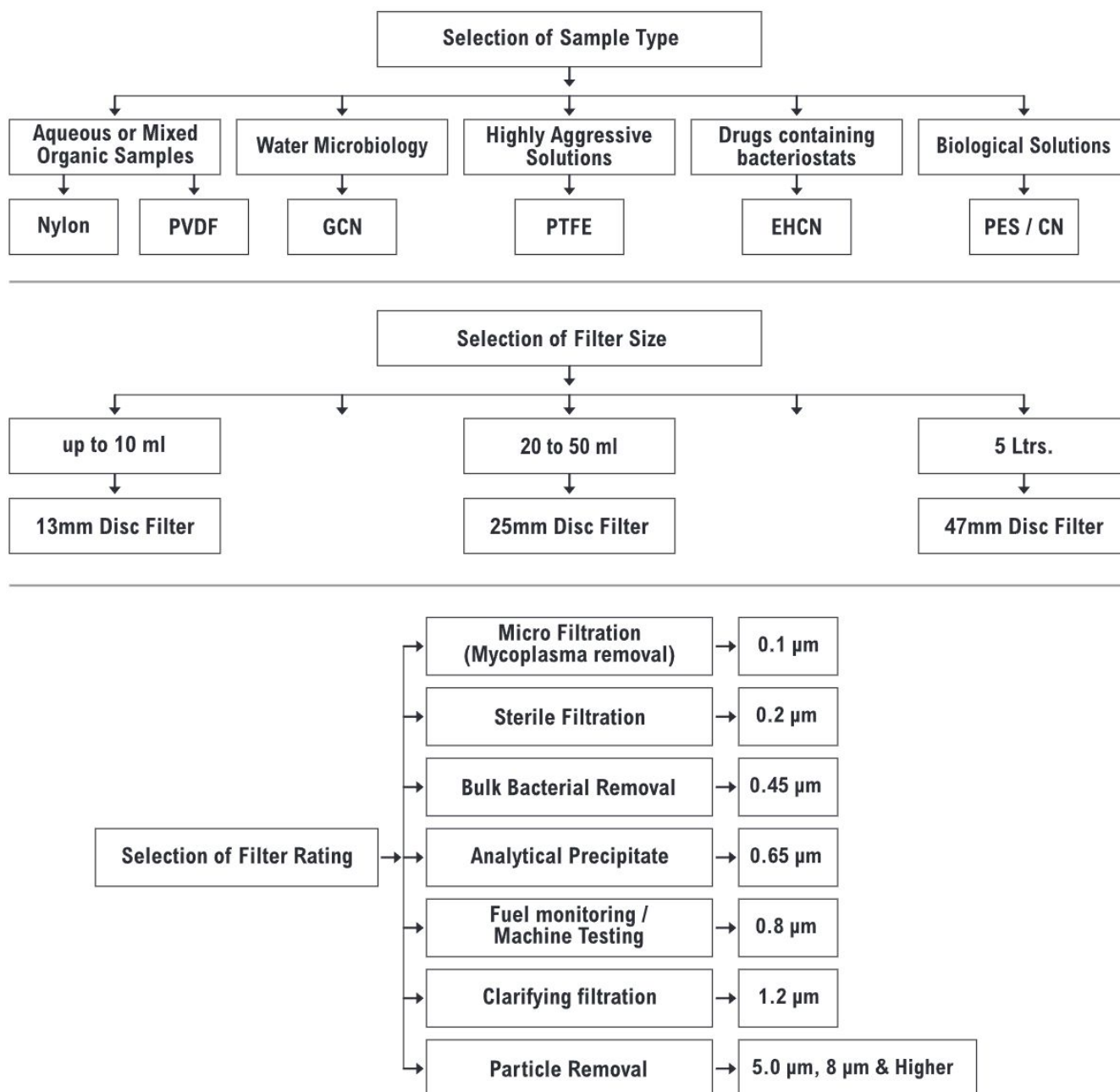
Filtration of samples and solvents -

Increase the accuracy and reliability of the results.

Eliminates the background peaks.

Prevents instruments downtime and extends the time between the maintenance and repairs.

How to choose Membrane Filter?



MEMBRANE FILTERS

NYLON (NY) MEMBRANE FILTERS



Description

Hydrophilic membrane. Ideal for use in general filtration or medical assays. Superior strength, resistant to a range of organic solvents. Low extractables. High protein binding capacity. Very high lot-to-lot consistency.

Characteristics

- Naturally hydrophilic
- Wide chemical compatibility range
- Strength and dimensional stability
- Low extractables

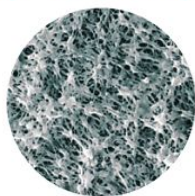
Applications

- Sterilization, clarification of aqueous and organic solvent solutions.
- Analytical sample preparation
- Chromatography
- Hydraulic Fluids and Machined Parts

NYLON MEMBRANE FILTERS (HYDROPHILIC)

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
NYMF 1302	13	0.2 µm	100
NYMF 1345	13	0.45 µm	100
NYMF 1301	13	0.1 µm	100
NYMF 2502	25	0.2 µm	100
NYMF 2545	25	0.45 µm	100
NYMF 2501	25	0.1 µm	100
NYMF 4702	47	0.2 µm	100
NYMF 4745	47	0.45 µm	100
NYMF 4701	47	0.1 µm	100
NYMF 4708	47	0.8 µm	100

HYDROPHILIC POLYTETRAFLUOROETHYLENE (PTFE HP) MEMBRANE FILTERS (NON STERILE)



Description

PTFE HP membrane is compatible with organic solvents, acids, and basic solutions. Hydrophilic PTFE membrane has low drug and protein binding properties with excellent aqueous and solvent compatibility. High sample recoveries and low ion and UV extractables provide for ideal analysis by µHPLC and LC/ MS.

Characteristics

- No need to pre-wet the membrane
- No need to flush membrane of pre-wetting chemicals
- No pre-wetting means production time reduction
- Reduce potential interference with biological processes
- Longer shelf life because the filters are stored and shipped dry

Applications

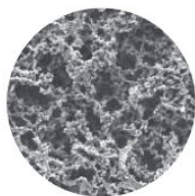
- * Molecular identification & Structural determination, * Pharmacokinetics, * Drug discovery and development (drug testing), * Environmental monitoring, * Food safety monitoring, * Oil composition determination

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
PTFEMFHP 1302	13	0.2 µm	100
PTFEMFHP 1345	13	0.45 µm	100
PTFEMFHP 2502	25	0.2 µm	100
PTFEMFHP 2545	25	0.45 µm	100
PTFEMFHP 4702	47	0.2 µm	100
PTFEMFHP 4745	47	0.45 µm	100



MEMBRANE FILTERS

MIXED CELLULOSE ESTERS MEMBRANE FILTERS (MCE)



Description

Hydrophilic membrane. Aqueous clarification and particulate capture. Consistent high flow rate for faster filtration. Uniform pore structure for selectivity. Hydrophilic, inert cellulose nitrate. High binding capacity.

Characteristics

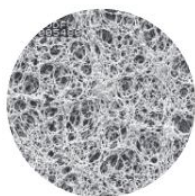
- Hydrophilic for aqueous clarification and particulate capture
- Consistent high flow rate for faster filtration
- Uniform pore structure for selectivity
- Hydrophilic, inert cellulose nitrate
- High binding capacity
- Manufactured thickness within 10 microns

Applications

- Filtration of Aqueous and Organic Solutions
- Analytical Sample Preparation
- Chromatography
- Clarification

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
MCEMF 2502	25	0.2 µm	100
MCEMF 2545	25	0.45 µm	100
MCEMF 4702	47	0.2 µm	100
MCEMF 4745	47	0.45 µm	100

POLYVINYLIDENE FLUORIDE HYDROPHILIC (PVDF) MEMBRANE FILTERS



Description

Hydrophilic membrane. Ideal for use in Sterilizing and Clarifying filtration of biological solutions. High Flow Rates. Low Extractables. Broad Chemical Compatibility. Very low protein binding.

Characteristics

- Hydrophilic for aqueous clarification and particulate capture
- Consistent high flow rate for faster filtration
- Uniform pore structure for selectivity
- Hydrophilic, inert cellulose nitrate
- High binding capacity
- Manufactured thickness within 10 microns

Applications

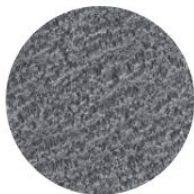
- Filtration of Aqueous and Organic Solutions
- Analytical Sample Prep
- Chromatography
- Clarification

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
PVDFMF 1302	13	0.2 µm	100
PVDFMF 1345	13	0.45 µm	100
PVDFMF 2502	25	0.2 µm	100
PVDFMF 2545	25	0.45 µm	100
PVDFMF 4702	47	0.2 µm	100
PVDFMF 4745	47	0.45 µm	100



MEMBRANE FILTERS

POLYTETRAFLUOROETHYLENE (PTFE) MEMBRANE FILTERS (HYDROPHOBIC)



Description

Hydrophobic membrane. Ideal for filtration of strong acids and aggressive solutions, venting applications, phase separations, aerosol samplings. Chemically and biologically inert. Superior chemical resistance. Can withstand high temperatures.

Characteristics

- Naturally hydrophobic
- Compatible with strong acids and aggressive solutions
- Improved durability and handling

Applications

- Filtration of strong acids and aggressive solutions
- Venting applications
- Phase separations
- Aerosol sampling

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
PTFEMF 1302	13	0.2 μ m	100
PTFEMF 1345	13	0.45 μ m	100
PTFEMF 2502	25	0.2 μ m	100
PTFEMF 2545	25	0.45 μ m	100
PTFEMF 4702	47	0.2 μ m	100
PTFEMF 4745	47	0.45 μ m	100

POLYETHERSULFONE (PES) MEMBRANE FILTERS



Description

Hydrophilic membrane. Designed to remove particulates during general filtration. Low protein and drug binding characteristics make it ideally suited for use in life science applications, maximizing recovery of critical drugs used in I.V. therapy, chemotherapy and open-heart surgery. Its strength and durability are advantageous during usage that involves aggressive handling or automated equipment. Low protein and drug binding characteristics

Characteristics

- Very Low Protein Binding
- Fast Flow Rates
- Low Extractables
- Wide Chemical Compatibility Range
- Strength and Dimensional Stability
- Autoclavable

Applications

- Protein and enzyme filtration sterilization
- Biological fluid filtration sterilization
- Tissue culture media sterilization
- Pharmaceutical sterilizing filtration
- Environmental water studies
- Filtration of Aqueous Solutions
- Analytical Sample Preparation
- IC Chromatography
- Sterile Filtration and Clarification
- Cell Culture

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
PESMF 1302	13	0.2 μ m	100
PESMF 1345	13	0.45 μ m	100
PESMF 2502	25	0.2 μ m	100
PESMF 2545	25	0.45 μ m	100
PESMF 4702	47	0.2 μ m	100
PESMF 4745	47	0.45 μ m	100



MEMBRANE FILTERS

CELLULOSE NITRATE MEMBRANE FILTERS (NON STERILE)

(White Plain C.N. Circles)



Description

Recommended for clarification and sterilisation of aqueous solutions, microbiological analysis and particle counts

Characteristics

- Made of cellulose nitrate, hydrophilic
- Very high flow rate
- High non-specific adsorption
- Very uniform pore structure which ensures homogeneous distribution of the particles retained on the filter surface

Applications

- Particle size analysis
- Pre-filtration and clarification of samples prior to further analysis
- Removal of particles in suspensions to determine the degree of impurity
- Measurement of sewage sludge in clarification plants
- Analysis of cell solutions

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
CNMF 1302	13	0.2 µm	100
CNMF 1345	13	0.45 µm	100
CNMF 2501	25	0.1 µm	100
CNMF 2502	25	0.2 µm	100
CNMF 2545	25	0.45 µm	100
CNMF 2508	25	0.8 µm	100
CNMF 4701	47	0.1 µm	100
CNMF 4702	47	0.2 µm	100
CNMF 4745	47	0.45 µm	100
CNMF 4765	47	0.65 µm	100
CNMF 4708	47	0.8 µm	100
CNMF 4712	47	1.2 µm	100
CNMF 4720	47	2.0 µm	100
CNMF 4730	47	3.0 µm	100
CNMF 4750	47	5.0 µm	100
CNMF 4780	47	8.0 µm	100

CELLULOSE NITRATE GRIDDED MEMBRANE FILTERS (STERILE)

(Ideal for Membrane microbiology analysis - individually Packed White Membrane with Black Grid Filter Media c.n)

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
CNGMF 4745	47	0.45 µm	100

PM 2.5 AIR MONITORING MEMBRANE

Filter Media - PTFE & Support Ring Media : Polypropylene.

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
PTFEMF 46220	46.2	2.0 µm	50

GLASS FIBER (GF) PRE FILTERS

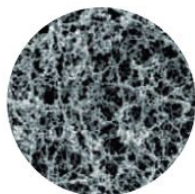
Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
GFPMF 14215	142	1.5 µm	50
GFPMF 29315	293	1.5 µm	50
GFPMF 29320	293	2.0 µm	50



MEMBRANE FILTERS

CELLULOSE ACETATE (CA) MEMBRANE FILTERS (NON STERILE)

(Colour white, Surface Plain, Hydrophilic)



Description

Hydrophilic membrane. Low protein binding. Ideal for protein, cell culture media and enzymes filtrations, tissue culture media sterilization, biological fluid filtration and other filtration applications where maximum recovery of proteins is critical.

Characteristics

- Low protein binding, 3.8 µg/cm²
- Hydrophilic
- High throughput
- Superior strength and stability
- Uniform pore structure, consistent flow rates
- Burst strength of 130 psi

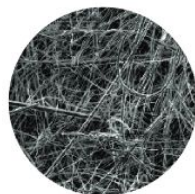
Applications

- Protein and enzyme filtration
- Biological fluid filtration sterilization
- Tissue culture media sterilization
- Clarification of aqueous and alcohol solutions
- Cell Culture

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
CAMF 1302	13	0.2 µm	100
CAMF 1345	13	0.45 µm	100
CAMF 2502	25	0.2 µm	100
CAMF 2545	25	0.45 µm	100
CAMF 4702	47	0.2 µm	100
CAMF 4745	47	0.45 µm	100

GLASS FIBER (GF) MEMBRANE FILTERS

(Ideal for pre-filtration)



Description

Hydrophilic material. Used also as a pre-filter to extend membrane life. Eliminate sample contamination. Excellent wet strength for each handling and filter integrity. Ideal for water/air pollution analysis, liquid clarification and cell harvesting.

Characteristics

- Acrylic binder
- High dirt holding capacity
- Biologically inert
- Bonding reduces media migration

Applications

- Filtration of Aqueous and Organic Solutions
- Analytical Sample Preparation
- Difficult to Filter Solutions
- Fuel Hydraulic Fluids and Machined Parts

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
GFMF 1302	13	0.2 µm	100
GFMF 2502	25	0.2 µm	100
GFMF 4702	47	0.2 µm	100
GFMF 5002	50	0.2 µm	100
GFMF 1303	13	0.3 µm	100
GFMF 4730	47	3.0 µm	100

MIXED CELLULOSE ESTERS GRIDDED MEMBRANE FILTERS (MCE) STERILE

(Ideal for Membrane microbiology analysis - individually Packed White Membrane with Black Grid Filter Media MCE)

Code	Size In (mm)	Pore Size	Circles/Sheets Per Pack
MCEGMF 4745	47	0.45 µm	100



LABORATORY GRADE TISSUE PAPERS

Tissue Paper have the characteristics for use in laboratories-

- Papers are made from pure cellulose and sufficiently strong.

Colour : White

GSM : 22

LABORATORY GRADE TISSUE PAPER ROLLS

Code	Pack	Size In (mm)	Spools Per Roll	Paper Type	PLY
TSR1010	1	100 x 100	200	Embossed	2
TSR1010	1	100 x 100	520	Plain	2

Embossed Tissue Paper Roll	Plain Tissue Paper Roll
	

CLEANING WIPES

Code	Size In (mm)	Wipes Per Pack	PLY	Pack of
TSP1318/60	130x180	300 Wipes	1	60
TSP1318/30	130x180	300 Wipes	1	30

CARTON PACK-60



CARTON PACK-30



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