

A leading brand in Syringe Filters, Glass Fiber, Membrane Filters, Air Vent Filters



COMPANY PROFILE



About Us

Omicron Scientific, Inc. is a technology-focused company with strong competence across micro-filtration, serving the pharmaceutical, research and immunodiagnostics industries.





We strive to work in markets only where we an add significant value to our clients, illustrated through:

- Significant technical knowledge and R&D required for the product.
- · Clients require a strong technical support based on their application
- There are limited number of companies operating in the space.

Our Focus

As our knowledge grows, we sharply increase our focus to penetrate deeper into the micro-filtration market building more in-house engineering capabilities, R&D for newer products and deriving efficiencies in our core business.

Vision

To build an ecosystem of superior high-end technology solutions for pharmaceutical industry.

Mission

Developing a strong R&D backed organization providing best micro-filtration solutions with end-to-end technical support to our clients.

Quality Control

Omicron Q.C. Lab is studded with many high end equipments required for testing, including "HPLC", "U.V. Spectrophotometer", etc. apart from highly experienced professionals.

Quality Standards

Every pack of Syringe Filters, Membrane Filters is supplied with proper documentation & batch test certificates. CofA is available batch wise for all products.



What is a Syringe Filter?

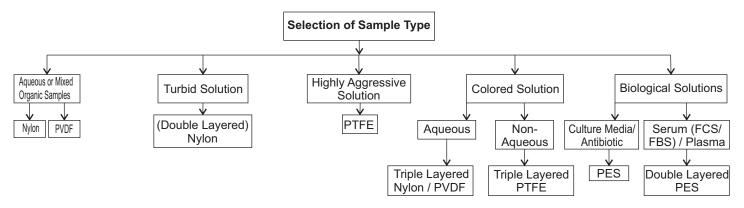
Syringe Filter is a single use filter cartridge and it is attached to the end of a syringe for use. Omicron Syringe Filters have a Luer Lock fitting.

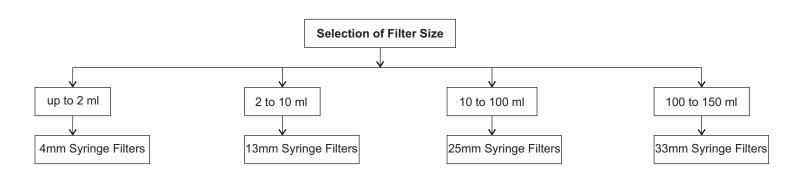
A syringe filter generally consist of a plastic housing with a membrane which serve as a filter. The fluid to be purified may be cleaned by drawing it up the syringe through the filter, or by focusing the unfiltered fluid out through the filter.

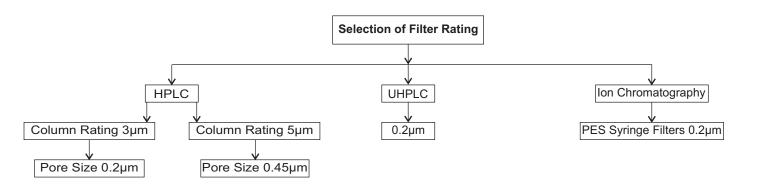
Filtration of samples and solvents through syringe filters

- 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 a syringe filter?







Note - For ion chromatography, it is essential that the filters does not elute ion into the sample.

Note - Double Layered recommended for viscous and turbid solutions.

Note - Triple Layered recommeded for highly viscous and highly turbid solutions.

NYLON SYRINGE FILTERS



Omicron - NYLON SYRINGE FILTERS - Sterile

Media - Nylon₆₆ Housing - Polypropylene

Technical Specification:

Retention Efficiency : $0.2 \,\mu\text{m} - \text{LRV} > 7$ for Brevundimonas diminuta

: $0.45 \,\mu\text{m} - \text{LRV} > 7 \,\text{for Serratia marcescens}$

Wettability : Hydrophilic

Sterilization : ETO

Effective filtration area : 0.1cm^2 for 4 mm, 0.8 cm^2 for 13 mm & 3.9 cm^2 for 25 mm & 4.6 cm^2 for 33 mm Hold up volume : $<10 \ \mu l$ for 4 mm, $<20 \ \mu l$ for 13 mm & $<50 \ \mu l$ for 25 mm & <80 mm for 33 mm

(after air purge)

Intergrity Test : Water Bubble point > 50psi for 0.2 μ m & > 30 psi for 0.45 μ m

Extractable (NVR) : Very low (with in limit as specified in USP XXIV) Initial Water flow rate : $35.4 \, \text{ml/min}$ for $0.2 \, \mu \text{m} \, \& \, 67.2 \, \text{ml/min}$ for $0.45 \, \mu \text{m}$

(at 10 psi for 25 mm)

Filtration Volume : < 1 ml for 4 mm, 1-10 ml for 13 mm & 10-100 ml for 25 mm & 30-150 ml for 33 mm

Omicron - NYLON SYRINGE FILTERS - Non-Sterile

packed in transparent Plastic Jar (BULK PACK)

ORDERING INFORMATION

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
SFNY04RB	4	0.2µm	100
SFNY04XB	4	0.45µm	100
SFNY13PB	13	0.1µm	100
SFNY13RB	13	0.2µm	100
SFNY13XB	13	0.45µm	100
SFNY25PB	25	0.1µm	100
SFNY25RB	25	0.2µm	100
SFNY25XB	25	0.45µm	100
SFNY33RB	33	0.2µm	50
SFNY33XB	33	0.45	50





PTFE SYRINGE FILTERS

Omicron PTFE SYRINGE FILTERS - Sterile

Media - Polytetrafluoro ethylene (Hydrophobic) , Widely chemical compatible

Technical Specification:

Retention Efficiency : $0.2 \mu m - LRV > 7$ for Brevundimonas diminuta

 $0.45 \,\mu\text{m} - \text{LRV} > 7 \,\text{for Serratia marcescens}$

: Hydrophobic Wettability

Sterilization : ETO

Effective filtration area : 0.1 cm² for 4mm, 0.8 cm² for 13mm & 3.9 cm² for 25mm & 4.6 cm² for 33mm Hold up volume

 $<10 \,\mu$ l for 4mm, $<20 \,\mu$ l for 13mm & $<50 \,\mu$ l for 25mm & <80mm for 33mm

(after air purge)

Intergrity Test Water Bubble point > 50psi for 0.2μ m & > 30 psi for 0.45μ m

Extractable (NVR) : Very low (with in limit as specified in USP XXIV) Initial 40% IPA Flow Rate : 21 ml/min for $0.2 \mu m \& 29.3 \text{ ml/min for } 0.45 \mu m$

(at 10 psi for 25 mm)

Filtration Volume < 1 ml for 4mm, 1-10ml for 13mm & 10-100ml for 25mm & 30-150 ml for 33mm



Applications:

- For Analytical and Research applications & for Air sampling.
- Used under extreme chemical or temp. Conditions.
- For non- aqueous base organic solvent filtration
- Ideal for filtration of highly aggressive colloidal solutions.

Omicron PTFE SYRINGE FILTERS - Non-Sterile

Hydrophobic, packed in transparent Plastic Jar (BULK PACK)

ORDERING INFORMATION

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
SFTF04RB	4	0.2µm	100
SFTF04XB	4	0.45µm	100
SFTF13RB	13	0.2µm	100
SFTF13XB	13	0.45µm	100
SFTF25RB	25	0.2µm	100
SFTF25XB	25	0.45µm	100
SFTF33RB	33	0.2µm	50
SFTF33XB	33	0.45	50

HYDROPHILIC PTFE SYRINGE FILTERS



Omicron HYDROPHILIC PTFE SYRINGE FILTERS

Media - Polytetrafluoro ethylene (Hydrophilic) ,wide chemical compatibility.
Hydrophilic PTFE Syringe Filters are made from special hydrophilic PTFE membrane as the filter medium.
This material has lowest extractable, excellent solvent and pH resistance and optically clear when wet with water.

Hydrophilic PTFE Syringe Filter is versatile filter for aqueous and aggressive organic solvent based solutions.

Technical Specification:

Retention Efficiency : $0.2\mu m$ - LRV > 7 for Brevundimonas diminuto $0.45\mu m$ - LRV > 7 for Serratia marcescens

Wettability : Hydrophilic

Effective Filtration Area : 0.8 cm² for 13mm, 3.9 cm² for 25mm Hold up volume : < 20µl for 13mm, < 50µl for 25mm

Integrity Test : Water bubble point > 22 psi for $0.2\mu m$ & > 12psi for $0.45\mu m$

Extractable (NVR) : Very low (within limit as specified in USP XXIV) Initial 70% IPA flow rate : 21 ml/min for 0.2µm, 29.3 ml/min for 0.45µm

(at 10psi for 25mm)

Filtration Volume : 1-10ml for 13mm, 10-100ml for 25mm

Key Features

- Low Extractable
- No need to pre-wetting
- · High Flow rates with minimal aqueous extractables
- Low Surface Friction Co-efficient: 0.1
- High pH resistance

Key Applications

- HPLC sample preparation
- Routine QA/QC analysis
- Removal of protein precipitates
- · Dissolution testing
- Venting applications & Degassing solvents

Ordering Information

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
ICTF13RB	13	0.2µm	100
ICTF13XB	13	0.45µm	100
ICTF25RB	25	0.2µm	100
ICTF25XB	25	0.45µm	100





Omicron PVDF SYRINGE FILTERS - Sterile

Media - PVDF (Polyvinylidene fluoride) Housing - Polypropylene

Technical Specification:

Retention Efficiency : $0.2 \mu m - LRV > 7$ for Brevundimonas diminuta

: $0.45 \,\mu\text{m} - \text{LRV} > 7$ for Serratia marcescens

Wettability : Hydrophilic

Sterilization : ETO

Effective filtration area: 0.1cm² for 4mm, 0.8 cm² for 13mm & 3.9 cm² for 25mm & 4.6 cm² for 33mm

Hold up volume : $\langle 10 \mu | \text{ for 4mm}, \langle 20 \mu | \text{ for 13mm } \& \langle 50 \mu | \text{ for 25mm } \& \langle 80 \text{ mm for 33mm} \rangle$

(after air purge)

Intergrity Test : Water Bubble point > 50psi for 0.2μ m & > 30 psi for 0.45μ m

Extractable (NVR) : Very low (with in limit as specified in USP XXIV) Initial Water flow rate : 41.3ml/min for $0.2 \mu m \& 94.3$ ml/min for $0.45 \mu m$

(at 10 psi for 25 mm)

Filtration Volume : < 1 ml for 4mm, 1-10ml for 13mm & 10-100ml for 25mm & 30-150 ml for 33mm

Applications:

• For Analytical and Research applications.

• For aqueous as well as organic solvent filtration

• Filtration of difficult filter solutions.

OS-06 Omicron -- PVDF SYRINGE FILTERS - Non Sterile

Packed in transparent Plastic Jar (BULK PACK)

ORDERING INFORMATION

Cat No.	Size/Dia (mm	Micron Rating	Nos./Pkt
SFPV13RB	13	0.2µm	100
SFPV13XB	13	0.45µm	100
SFPV25RB	25	0.2µm	100
SFPV25XB	25	0.45µm	100



SYRINGE FILTERS GLASS FIBER

Omicron- - GLASS FIBER FILTERS

contains a glass fiber filter with high retention efficiency of 98% for 1.6um/1.0 μ m spherical particles. It is very useful when relatively dirty solutions are to be clarified, or as a prefilter is needed on an 0.2 μ m or 0.45 μ m

Materials of Construction:

Filter Media: Borosilicate glass fiber

Housing : Polypropylene

Technical Specification

Filter Rating : 1.0 µm or 1.6µm

Effective Filtration Area : 3.9 cm² for 25mm

Sample Volume : < 150ml for 25mm

Typical Hold-up Volume

(with air purge)

: $<100\mu I$ for 25mm

Maximum Operating

Maximum Operating

Temperature

Pressure

: 82°C (180°F) at 2.1 bar (210 kPa, 30 psi)

: 4.1 bar (410 kPa, 60 psi) at 21-24°C (70-75°F) 2.1 bar (210 kPa, 30 psi) at 82°C (180°F)

Typical Water Flow Rate : 795 ml/min at 1.0 bar (100 kPa, 15 psi)

Key Features

- Retain fine particles with good flow rate
- For the collection of suspended solids in portable water and natural and industrial waste
- Unique design of these filters gives high dirt holding capacity
- The filters can be stored almost indefinitely without change in color or effect in filter properties

Application

- For High throughput
- Sample cleaning
- · Particle removal
- Removes particulates that interferes with UV/VIS spectrophotometric analysis
- · Can be used alone or in series with another Omicron syringe filter

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
SFGF225B	25	1.0 µm	100
SFGF125B	25	1.6 µm	100

AVAILABLE IN 13mm & 33mm UPON REQUEST

PES SYRINGE FILTERS



Omicron PES SYRINGE FILTERS - Sterile

Media - PES (Polyethersulfone) Housing - Polypropylene

Technical Specification:

Retention Efficiency : $0.2 \,\mu\text{m} - \text{LRV} > 7$ for Brevundimonas diminuta

: $0.45 \,\mu\text{m} - \text{LRV} > 7$ for Serratia marcescens

Wettability : Hydrophilic

Sterilization : ETO

Effective filtration area : 0.1 cm² for 4mm, 0.8 cm² for 13mm & 3.9 cm² for 25mm & 4.6 cm² for 33mm

Hold up volume : $\langle 10 \,\mu l$ for $4 \,\mathrm{mm}$, $\langle 20 \,\mu l$ for $13 \,\mathrm{mm}$ & $\langle 50 \,\mu l$ for $25 \,\mathrm{mm}$ & $\langle 80 \,\mathrm{mm}$ for $33 \,\mathrm{mm}$ (after

air purge)

Intergrity Test : Water Bubble point > 50psi for 0.2 μ m & > 30 psi for 0.45 μ m

Extractable (NVR) : Very low (with in limit as specified in USP XXIV) Initial Water flow rate : 46.2ml/min for 0.2 μ m & 68.0ml/min for 0.45 μ m

(at 10 psi for 25 mm)

Filtration Volume : < 1 ml for 4 mm, 1-10 ml for 13 mm & 10-100 ml for 25 mm & 30-150 ml for 33 mm

Specific features:

· Low protein binding to minimize sample loss

• Wide chemical compatibility

• Low sample absorption

Applications:

- For Analytical and Research applications.
- Recommended for aqueous as well as organic solvent filtration
- Filtration of difficult filter solutions.



Omicron PES SYRINGE FILTERS - Non-Sterile Packed in transparent Plastic Jar (BULK PACK)

ORDERING INFORMATION

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
SFPS04RB	4mm	0.2µm	100
SFPS04XB	4mm	0.45µm	100
SFPS13RB	13mm	0.2µm	100
SFPS13XB	13mm	0.45µm	100
SFPS25RB	25mm	0.2µm	100
SFPS25XB	25mm	0.45µm	100

OMIDISC DOUBLE LAYERED SYRINGE FILTERS

With Glassfiber Prefilter



Omicron OMIDISC Double Layered Syringe Filter

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





Syringe Filter with Nylone Membrane + Glass Fiber Prefilter, Non Sterile

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Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFNY413RB	13	2 µm	0.2 μm	100
SFGFNY413XB	13	2 µm	0.45 μm	100
SFGFNY425RB	25	2 µm	0.2 μm	100
SFGFNY425XB	25	2 µm	0.45 µm	100

Syringe Filter with Nylon Membrane + Glass Fiber Prefilter Sterile

 Tomes delie				
Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFNY413R	13	2 µm	0.2 μm	100
SFGFNY413X	13	2 µm	0.45 μm	100
SFGFNY425R	25	2 µm	0.2 μm	50
SFGFNY425X	25	2 µm	0.45 μm	50

Syringe Filter with PES Membrane + Glass Fiber Prefilter Non Sterile

Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFPE13RB	13	2 µm	0.2 μm	100
SFGFPE13XB	13	2 µm	0.45 μm	100
SFGFPE25RB	25	2 µm	0.2 μm	100
SFGFPE25XB	25	2 µm	0.45 µm	100

Syringe Filter with PES Membrane + Glass Fiber Prefilter Sterile

Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFPE13R	13	2 µm	0.2 µm	100
SFGFPE13X	13	2 µm	0.45 µm	100
SFGFPE25R	25	2 µm	0.2 μm	50
SFGFPE25X	25	2 µm	0.45 µm	50

Syringe filter with PVDF Membrane + Glass Fiber Prefilter Non Sterile

Tomes from Sterile				
Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFPV13RB	13	1 µm	0.2 μm	100
SFGFPV13XB	13	1 µm	0.45 μm	100
SFGFPV25RB	25	1 µm	0.2 μm	100
SFGFPV25XB	25	1 µm	0.45 µm	100

Syringe Filter with PVDF Membrane + Glass Fiber Prefilter Sterile

 1 Territor Oterrio				
Cat No.	Size/Dia mm	Glass Fiber Rating	Membrane Rating	Nos./Pkt
SFGFPV13R	13	1 µm	0.2 μm	100
SFGFPV13X	13	1 µm	0.45 μm	100
SFGFPV25R	25	1 µm	0.2 μm	50
SFGFPV25X	25	1 µm	0.45 μm	50





The AD/X range is specifically designed for high particulate loaded samples. Constructed of a pigment-free polypropylene housing with two additional layers of Glass Microfiber filters, these filters eliminate sample contamination and allow you to filter even the most difficult samples with less hand pressure. AD/X syringe filters can process three to seven times more sample volume than standard syringe filters. The glass microfiber prefilters are produced from 100% borosilicate glass microfiber in Germany. Top layer retains particles to 1.0 μ m. A GF/FF filter then retains particles down to 0.7 μ m. The prefilter stack ends with a final membrane.

AD/X filter construction facilitates exceptional loading capacity with fast flow rates. This prevents the build up of back pressure typically caused by the blocking of an unprotected membrane.

- 13 and 25 mm diameter syringe filters
- 13 mm devices for samples up to 10 ml and 25 mm devices for samples greater than 10 ml (however, the volume of sample that can be filtered through each filter depends on the characteristics of the sample)
- Sterile options
- Pigment-free polypropylene housing

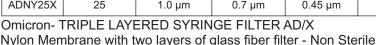
Benefits

- Eliminates sample contamination
- Requires less hand pressure, even with the most difficult samples
- Processes three to seven times more sample volume

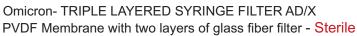


Nylon Membrane with two layers of glass fiber filter - Sterile

Cat No.	Size/Dia mm	Micron Rating GF1	Micron Rating GF2	Micron Rating Nylon	Nos./Pkt
ADNY25R	25	1.0 µm	0.7 μm	0.2 μm	50
ADNY25X	25	1.0 µm	0.7 μm	0.45 μm	50



Cat No.	Size/Dia mm	Micron Rating GF1	Micron Rating GF2	Micron Rating Nylon	Nos./Pkt
ADNY25RB	25	1.0 µm	0.7 μm	0.2 μm	100
ADNY25XB	25	1.0 µm	0.7 μm	0.45 µm	100



Cat No.	Size/Dia mm	Micron Rating GF1	Micron Rating GF2	Micron Rating Nylon	Nos./Pkt
ADPV25R	25	1.0 µm	0.7 μm	0.2 μm	50
ADPV25X	25	1.0 µm	0.7 μm	0.45 μm	50

Omicron- TRIPLE LAYERED SYRINGE FILTER AD/X PVDF Membrane with two layers of glass fiber filter - Non Sterile

Cat No.	Size/Dia mm	Micron Rating GF1	Micron Rating GF2	Micron Rating Nylon	Nos./Pkt
ADPV25RB	25	1.0 µm	0.7 μm	0.2 μm	100
ADPV25XB	25	1.0 µm	0.7 μm	0.45 μm	100





Omicron - NYLON MEMBRANE FILTERS Media - Nylon₆₆

Technical Specification

Color : White

Surface : Plain

Wettability : Hydrophilic

Extractable : Very Low (Within limit as specified in USP XXIV)

Heat Stability : Maintain integrity for 5 cycles of autoclave at 121°C for 30 minutes

Operating Temp. : 75°C

Application

(Sterile)

- Filtration of microbiological media, sera and other additives.
- · Ideal for HPLC solvent.
- Sterilizing filtration of pharmaceuticals aqueous solution and Bioassay.
- Filtration of wide range of injectable solution.
- · Ideal for Organic solvent.

(Non-Sterile)

- Mobile phase separation and solvent filtration.
- Ideal for HPLC solvent.

ORDERING INFORMATION

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
170025P	25	0.1 μm	100
170025X	25	0.45 μm	100
170047R	47	0.2 μm	100
170047X	47	0.45 μm	100
170047N	47	0.8 µm	100

CUSTOM SIZES & STERILE OPTIONS AVAILABLE UPON REQUEST



MEMBRANE FILTERS



Omicron - C.N. MEMBRANE FILTERS

Media - Cellulose Nitrate

CN Membrane Disc Filters are hydrophilic, non-media migrating, biologically inert plain white absolute membrane filter.

CN Membrane is recommended for most routine application involving particle cells from 0.1 µm to 8.0 µm

Technical Specification

Color : White Surface : Plain

Wettability : Hydrophilic

Operating Temp. : 55°C (max.)

Protein Binding : 150 μg/cm²

Extractable : Very Low (Within limit as specified in USP XXIV)

Application

(Sterile ETO)

- For analytical and research.
- Sterility testing
- · Ideal for microbial analysis.
- · Suitable for aqueous and protein filtration.

(Non-Sterile)

- · Ideal for microbial analysis
- · Suitable for aqueous and protein filtration
- Bio-burden reduction.

ORDERING INFORMATION

Cat No.	Size/Dia (mm)	Micron Rating	Nos./Pkt
160047R	47	0.2 μm	100
160047X	47	0.45 μm	100
160047U	47	0.8 µm	100
160047Z	47	5.0 μm	100

CUSTOM SIZES, STERILE & OTHER MICRONS AVAILABLE UPON REQUEST





Omicron - GRIDDED MEMBRANE FILTERS - Sterile

Media - Plain white Cellulose Nitrate, Individually packed

Technical Specification:

Wettability : Hydrophilic Surface : Gridded, Black

Sterilization : ETO

Applications:

- Ideal for Microbiology Analysis
- Suitable for aq. and protein filtration and protein analysis

ORDERING INFORMATION

Cat No.	Size/Dia mm	Micron Rating	Nos./Pkt.
160047 GXI	47	$0.45\mu\mathrm{m}$	100



Omicron - PES MEMBRANE FILTERS

Media - Polyether sulfone

Technical Specification:

Colour : White
Surface : Plain
Wettability : Hydrophilic

Extractable (NVR) : Very low (with in limit as specified in USP XXIV)

Heat Stability : Maintain integrity for 5 cycles of autoclave at 121C° for 30 minutes

Specific features:

- Low protein binding to minimize sample loss
- · Wide chemical compatibility
- Low sample absorption



Applications:

- For Protein sampling
- For aqueous as well as organic solvent filtration
- Prevent blow through low molecular weight protein
- Filtration of difficult filter solutions

ORDERING INFORMATION

Cat No.	Size/Dia mm	Micron Rating	Nos./Pkt.
230047R	47	0.2 μm	100
230047X	47	0.45 μm	100

AIR VENT FILTERS



Omicron - AIR VENT FILTERS - Sterile

Media - PTFE Polytetrafluoro ethylene (Hydrophobic)

Technical Specification

Retention Efficiency : 0.2 µm - LRV > 7 for Brevundimonas diminuta

Wettability : Hydrophobic

Sterilization : ETO

Max. Temperature : 60°C (140°F)

Sterilization : Can withstand 30 cycles at 121°C

(249.8°F) for 20 minutes or 3 cycles at 134°C(273.2°F) for 30 minutes

134 C(2/3.2 F) 101 30

Bubble Point : > 24 psi in 70% IPA Air Flow Rate : 10 NLPM at 5 psi

Effective Filtration Area: 16.2 cm²

Housing Burst at 25°C : 75 psi (5.17 bar)

Applications

· Pharmaceutical vents

Applicable for small volume venting & degassing venting bioreactors

 Fermentation tanks & carboys Sterile gas purging of culture vessel

 Laboratory: clean or sterile: gas, solvents, reagents, drying gases

Electronics: photoresists, solvents, gases for research

Benefits of venting

- · Contamination control
- · Higher throughput, increased flow rates
- High permeability rates
- · Increased systems suitability

Ordering Information

Cat No.	Diameter (mm)	Micron Rating	No./Pack
200050R	50	0.2 μm	10
200050X	50	0.45 μm	10



GLASS FIBER FILTERS



Product Description

Omicron Glass Fiber filters are manufactured from pure Borosilicate Glass Fiber and is available in a wide range of nominal pore sizes. Omicron Glass Fiber Filters have extremely low pressure drop, making them an excellent choice as a pre-filter for fluids that have high viscous and high dust holding capacity. The high contaminant loading feature extends the life of the final downstream filter, improving your total cost of ownership. It is an ideal filter for higher particulate loading capacity with faster flow rates. Omicron Glass Fiber pre-filter is means to economical solution for your filtration needs. Target applications include salt, sugar, sera, tissue lysates, protein solutions, and environmental samples, like soil and ground water, where there is an elevated level of suspended or un-dissovled particles.

ISO 9001 Quality Standard

The production processes of Omicron Glass Fiber Filters have been validated with an accredited registered body to ISO 9001:2015 Quality System Standards.

Features and Benefits

- · Biologically inert
- · High dirt loading capacity
- · Available with Acrylic binders
- Low resistance with high filtration efficiency
- Hydrophilic material membrane
- Low extractable

Typical Applications

Omicron Glass Fiber filter is used for large and fast filtration, for ultra with high product recovery. It is used in a variety of sample clean-up, pre-filtration, and analytical testing applications. The typical applications include:

GF/1F (1.6 µm) Glass Fiber

- Stack sampling and Air pollution monitoring
- · Water pollution monitoring of effluents
- Filtration of water, algae and bacteria cultures
- Food stuff analysis
- Gravimetric determination of airborne particulates

GF/2F (1.0 µm) Glass Fiber

- Liquid clarification of viscous biological solutions
- Solids quantification of heavily loaded fine particulate suspensions
- · Clarification of particulate laden solutions
- · Used is LSC techniques where high loading capacity is required

GF/3F (1.2 µm) Glass Fiber

- · Collection of suspended solids in potable water
- · Filtration of natural and industrial wastes

GF/4F (2.7 µm) Glass Fiber

- Solvent filtrations
- Used as pre-filter to extend the life of membrane filters
- · High loading capacity and wet strength

GF/5F (0.7 µm) Glass Fiber

- Very rapid flow rate
- High loading capacity
- · DNA binding and purification
- · Clarification of extremely 'difficult' biochemical solutions and fluids.



GF/20 (0.2 µm) Glass Fiber

- Sterilization of small volume
- Used as a final filtration
- Reduce mycoplasma
- Commonly used for contaminated samples

GF/45 (0.45 µm) Glass Fiber

- Analysis of bacteria
- Used as Sterility testing
- For clarification and pre-filtration

Product Specifications

Types of Glass Fiber Filters

Specifications	GF/1F	GF/2F	GF/3F	GF/4F	GF/5F	GF/20	GF/45
Filtration Rating	1.6µm	1.0µm	1.2µm	2.7μm	0.7μm	0.2μm	0.45μm
Material	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass	Borosilicate Glass
Binder	Binder Free	Binder Free	Binder Free	Binder Free	Binder Free	Binder Free	Binder Free
Temperature	500° C	500° C	500° C	500° C	500° C	500° C	500° C
GSM (g/m²)	53 ± 2	127 ± 2	51 ± 2	143 ± 2	75 ± 2	125 ± 2	171±2
Typical Thickness	220 ± 10 μm	500 ± 10 μm	280 ± 10 μm	800 ± 10 μm	550 ± 10 μm	550 ± 10 μm	650 ± 10 μm
Filtration Speed (Herzberg)	67 sec	190 sec	112 sec	42 sec	163 sec	308 sec	230 sec
Wetting Time	=2 sec	=2 sec	=2 sec	=2 sec	=2 sec	=2 sec	=2 sec
Wettability	Fast Wet	Fast Wet	Fast Wet	Fast Wet	Fast Wet	Fast Wet	Fast Wet
Tensile Strength (Dry)	9 psi	18 psi	9 psi	18 psi	22 psi	16 psi	26 psi
Tensile Strength (Wet)	6 psi	14 psi	6 psi	10 psi	12 psi	13 psi	17 psi
Wet Strength	0.66	0.77	0.66	0.55	0.54	0.81	0.88
Capillary Rise (mm/min)	53 mm	48 mm	58 mm	89 mm	55 mm	42 mm	55 mm
DOP Retention	99.97%	99.97%	99.97%	99.97%	99.97%	99.97%	99.97%
Change in Appearance		No crack or hole is observed when it is folded.					



Ordering Information

Glass Fiber: GF/1F - 1.6 µm

Cat No.	Size	Nos./Pk
130810	203 X 254 mm (Sheet)	100
130025	25 mm (Circle)	100
130425	42.5 mm (Circle)	100
130047	47 mm (Circle)	100
130090	90 mm (Circle)	100

Glass Fiber : GF/2F - 1.0 µm

Cat No.	Size	Nos./Pk
131047	47 mm (Circle)	100

Glass Fiber : GF/3F - 1.2 µm

Cat No.	Size	Nos./Pk
133047	47 mm (Circle)	100
133070	70 mm (Circle)	100
133090	90 mm (Circle)	100
133110	110 mm (Circle)	100

Glass Fiber : GF/4F - 2.7 µm

Cat No.	Size	Nos./Pk
129047	47 mm (Circle)	100

Glass Fiber: GF/5F - 0.7 µm

Cat No.	Size	Nos./Pk
134047	47 mm (Circle)	100
134090	90 mm (Circle)	100

Glass Fiber : GF/20 - 0.2 µm

Cat No.	Size	Nos./Pk
135047	47 mm (Circle)	100

Glass Fiber: GF/45 - 0.45 µm

Cat No.	Size	Nos./Pk
136047	47 mm (Circle)	100







QUALITATIVE FILTER PAPER

Omicron - QUALITATIVE FILTER PAPERS

No. 101 (Circles) - Research Grade (Closely similar to grade 1)

Composition:

Omicron filter paper are made of highly ultrafine cellulose fibers.

Technical specification:

Retention : Medium crystalline
Filter speed : Medium fast
GSM : 90 (approx)
pH Resolution : Very low
Wet strength : High
Ash contents : < 0.1%

Applications:

Ideal for general laboratory filtration and sugar syrup filtration

ORDERING INFORMATION

Cat No.	Size/Dia cm	Nos.of Circles /pkt	Nos.of pkt/std. box
101050	5.0	100	5
101070	7.0	100	5
101090	9.0	100	5
101110	11.0	100	5
101125	12.5	100	5
101150	15.0	100	5
101185	18.5	100	5
101240	24.0	100	5
101320	32.0	100	5



