

CELLULOSE NITRATE MEMBRANE FILTER

PRODUCT DESCRIPTION

Axiva Cellulose Nitrate membrane filter are hydrophilic, non-media, biologically inert, plain, white absolute membrane filter available in wide range of pore size from 0.1 μm to 8.0 μm . They remove microorganisms, particles, precipitates, and un-dissolved solid particles / high particulate solution from aqueous solutions. The larger pore sizes (1.2 μm , 2 μm , 3 μm , 5 μm , and 8 μm) find use for chemotaxis and cell retention while the narrow pore sizes (0.1 to 0.8 μm) for particle collection.

They are non-pyrogenic, non-toxic and single use products. Cellulose Nitrate membrane filters are manufactured using a unique impregnate process that eliminates cracking, tearing, breaking and distortion during use. They have low extractable which assure them for ideal solvent filtration and sample preparation for microbiological studies. The production processes of Axiva Cellulose Nitrate membrane filter have been validated with an accredited registered body which meets an ISO 9001: 2008 Quality System Standards and meets CE certifications and supplied in accordance with a Quality Management System governed by Axiva Sichem Pvt. Ltd.

TYPICAL APPLICATIONS

Axiva Cellulose Nitrate membrane filter is designed to meet speed up and increase sample volume while reducing back pressure caused by the blocking of an unprotected membrane. Typical research laboratory applications include:

Features and Benefits:

- Absolute retention
- Narrow pore size distribution
- Higher flow rates
- Low extractable levels
- High non-specific adsorption

Applications

- Sample preparation
- Microbiological studies
- Filtration of aqueous solutions

Field of Application	Pore Size (µm)
General	
Microfiltration	0.1
Ultracleaning	0.1
Sterilizing	0.2
Bulk bacterial removal	0.45
Analytical precipitates	0.65
Clarifying filtration	1.2
Particle removal	5.0
Water Microbiology and Analysis	
Bacterial colony count	0.45 (Gridded)
Microscopy	0.45 (Gridded)
Particle testing	0.45
Sediment analysis	0.45
Suspended particles	5.0
Air Pollution Monitoring	
Asbestos Monitoring (NIOSH)	0.8
Food and Beverage QC	
<i>E. coli</i> and Coliforms	0.45 (Gridded)
Total bacteria count	0.2
Tissue Culture	
Mycoplasma removal	0.1
Sterile filtration	0.2
Industry Applications	
Automobile (Machine Testing)	5.0

PRODUCT SPECIFICATIONS - DESIGNS & COMPOSITION

General Specifications

Color	White
Surface	Plain
Wettability	Hydrophilic

Typical Thickness	140 ± 10 µm
Porosity	65-80%
Max Operating Temp.	75°C (167°F)
Autoclave stability	Maintains integrity after 1 autoclave sterilization cycles at 121°C (15 min; 1 bar).
Extractable (NVR)	very low (within limit as specified in USP XX1V)
Applicable pH range	4-8

Technical Specifications

Catalog No.	Pore Size	Bubble Point	Burst Strength	Water Flow Rate (25 mm SS Holder at 10 psi through Pressure Vessel)
160013R	0.2 µm	≥52 psi	≥25 psi	≥23 mL/min
160013X	0.45 µm	≥32 psi	≥22 psi	≥49 mL/min
160025P	0.1 µm	≥70 psi	≥28 psi	≥25 mL/min
160025R	0.2 µm	≥52 psi	≥25 psi	≥65 mL/min
160025X	0.45 µm	≥32 psi	≥22 psi	≥95 mL/min
160025N	0.8 µm	≥18 psi	≥16 psi	≥208 mL/min
160047P	0.1 µm	≥70 psi	≥28 psi	≥25 mL/min
160047R	0.2 µm	≥52 psi	≥25 psi	≥65 mL/min
160047X	0.45 µm	≥32 psi	≥22 psi	≥95 mL/min
160047S	0.65 µm	≥25 psi	≥18 psi	≥130 mL/min
160047N	0.8 µm	≥18 psi	≥16 psi	≥208 mL/min
160047U	1.2 µm	≥12 psi	≥14 psi	≥260 mL/min
160047V	2.0 µm	≥13 psi	≥12 psi	≥380 mL/min
160047W	3.0 µm	≥10 psi	≥12 psi	≥450 mL/min
160047Z	5.0 µm	≥9 psi	≥10 psi	≥568 mL/min
160047Y	8.0 µm	≥8 psi	≥10 psi	≥770 mL/min
160090R	0.2 µm	≥52 psi	≥40 psi	≥ 65 mL/min

160090X	0.45 µm	≥32 psi	≥35 psi	≥ 95 mL/min
160090Z	5.0 µm	≥9 psi	≥30 psi	≥568 mL/min

ORDERING INFORMATION

Catalog No.	Size/Dia. (mm)	Filtration Rating	Nos./Pkt.
160013R	13	0.2 µm	100
160013X	13	0.45 µm	100
160025P	25	0.1 µm	100
160025R	25	0.2 µm	100
160025X	25	0.45 µm	100
160025N	25	0.8 µm	100
160047P	47	0.1 µm	100
160047R	47	0.2 µm	100
160047X	47	0.45 µm	100
160047S	47	0.65 µm	100
160047N	47	0.8 µm	100
160047U	47	1.2 µm	100
160047V	47	2.0 µm	100
160047W	47	3.0 µm	100
160047Z	47	5.0 µm	100
160047Y	47	8.0 µm	100
160090R	90	0.2 µm	100
160090X	90	0.45 µm	100
160090Z	90	0.8 µm	100

Production Filters

Catalog No.	Size/Dia. (mm)	Filtration Rating	Nos./Pkt.
160142R	142	0.2 µm	50
160142X	142	0.45 µm	50
160142N	142	0.8 µm	50
160293R	293	0.2 µm	50
160293X	293	0.45 µm	50
160293N	293	0.8 µm	50