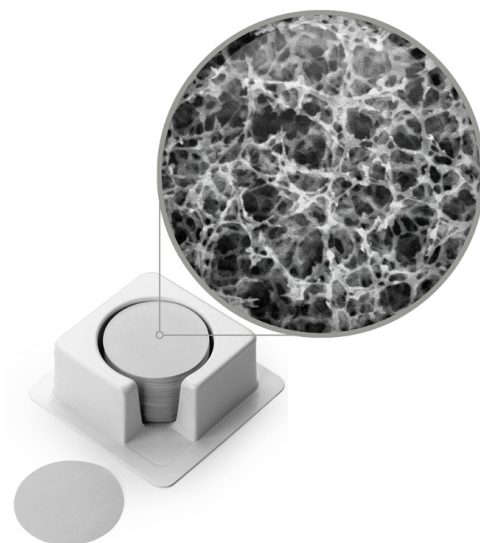


MIXED CELLULOSE ESTER MEMBRANE FILTERS

Hydrophilic Mixed Cellulose Esters (MCE) membranes utilize a mixture of cellulose nitrate/acetate fibers to deliver superior flow rates and high protein binding; ideal for particle monitoring, diagnostic kit manufacturing, and microbiology applications.

MCE membrane filters are optimized for use with a variety of sample media and volumes because they have a uniform pore structure, consistent thickness, and a smoother surface than their pure nitrocellulose counterparts. These membranes are designed for quick and easy identification of surface-retained particles, which decreases eye fatigue. These filters are available with a variety of custom features, including white discs to observe changes in color; black discs that contrast microorganisms, yeast, and mold, while facilitating manual counting without a counter-stain; and gridded options for both colors to accurately quantify microbial growth/colonies. These are also available for use with critical samples.



APPLICATIONS

MCE Non-Sterile Membrane Filter

General Filtration

- Sterilizing biological fluids
- Contamination analysis (sterile preferred)

Medical Assays

- hCG
- Chlamydia
- Strep A
- HIV
- Drugs of abuse
- Environmental contaminants
- Pathogenic microorganisms

Detection Methods

- Immunochromatographic Assays
- Lateral flow Immunoassays w/ Latex Beads
- Capillary Immunoassays w/ Colloidal Gold
- Latex Agglutination Assays

Immobilizations

- Dot/Slot Blotting
- Direct Spotting
- Direct-line Applications with a Sprayer
- Immersion and Drying

MCE Sterile Membrane Filter

Water and Wastewater Industry:

Capturing/culturing microorganism using the MF Technique

- Test Method 9222 B: Total Coliforms (0.45 μm)
- Test Method 9222 D: Fecal Coliforms (0.45 μm)
- Test Method 9230 C: Fecal Coliforms (0.45 μm)

- Test Method 9215 D: Total Bacteria (0.22 μm /0.45 μm)
- Test Method 9260 B: Salmonella (0.45 μm)
- Test Method 9213: Pseudomonas sp (0.22 μm)
- Test Method 9213 E: Pseudomonas aeruginosa (0.80 μm)

SPECIFICATIONS

GENERAL			
Sterilization	Gamma Irradiation, EtO, Autoclave		
USP Class VI Testing	Passed		
BSA Protein Binding	~160 µg/cm2		
Extractables	<4%		
Max. Operating Temp.	130°C (266°F)		
Sealing Compatibility	Ultrasonic, Heat, Radio Frequency, Insert Molding		
Nominal thickness	150 µm		
PERFORMANCE BY PORE SIZE			
	Air Flow Rate ²	H ₂ O Flow Rate ³	Bubble Point (psi)
0.10 µm	0.67	2.7	35.3
0.20 µm	2.4	17.5	54.5
0.45 µm	5.0	45.0	35.0
0.65 µm	11.2	120.0	21.3
0.80 µm	15.0	165.0	16.4
1.00 µm	20.4	220.0	13.9
3.00 µm	28.3	300.0	10.2
5.00 µm	40.9	400.0	8.5
8.00 µm	65.0	N/A	4.0

¹ Measurements for gridded membranes will differ

² Measured as L/min/cm²

³ Measured as mL/min/cm²