Bioset Monitor

Membrane Solutions

Each unit consists of ready-to-use graduated filter funnel with membrane base and removable lid & plug.

Robust packaging to prevent damage during shipment.

Bioset Monitor - Product Introduction

- This membrane filtration method is the suitable technique for microbiological analysis of pharmaceuticals, water, foods and beverages.
- The use of ready-to-use disposable units are optimal for Microbiological Analysis applications.
- This system is low-cost disposable, ready to use sterile filter sets bring significant convenience to your daily activities in the laboratory and enable you to optimize the analysis time for routine testing.
- Each unit consisting of a measured filter funnel, base, membrane, removable lid and plug.

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Bioset Monitor - Specification

Housing:	Optimized Plastic Filter Device for Microbiological Analysis		
Membrane | Grid Color:	White		
Membrane Medium:	Mixed Cellulose Ester		
Diameter (mm):	47		
Pore Size (µm):	0.22	0.45	0.65
Wettability:	Hydrophilic		
Sterile:	Yes (Gamma irradiated, 25 kGrey)		
Capacity:	100 mL		
Surface:	Gridded		
DI Water Flow Rate @ 25°C, -10psi (ml/min/cm²):	15	40	100
Microbiological Recovery Rate	**≥90%**		

How to use Bioset Monitors

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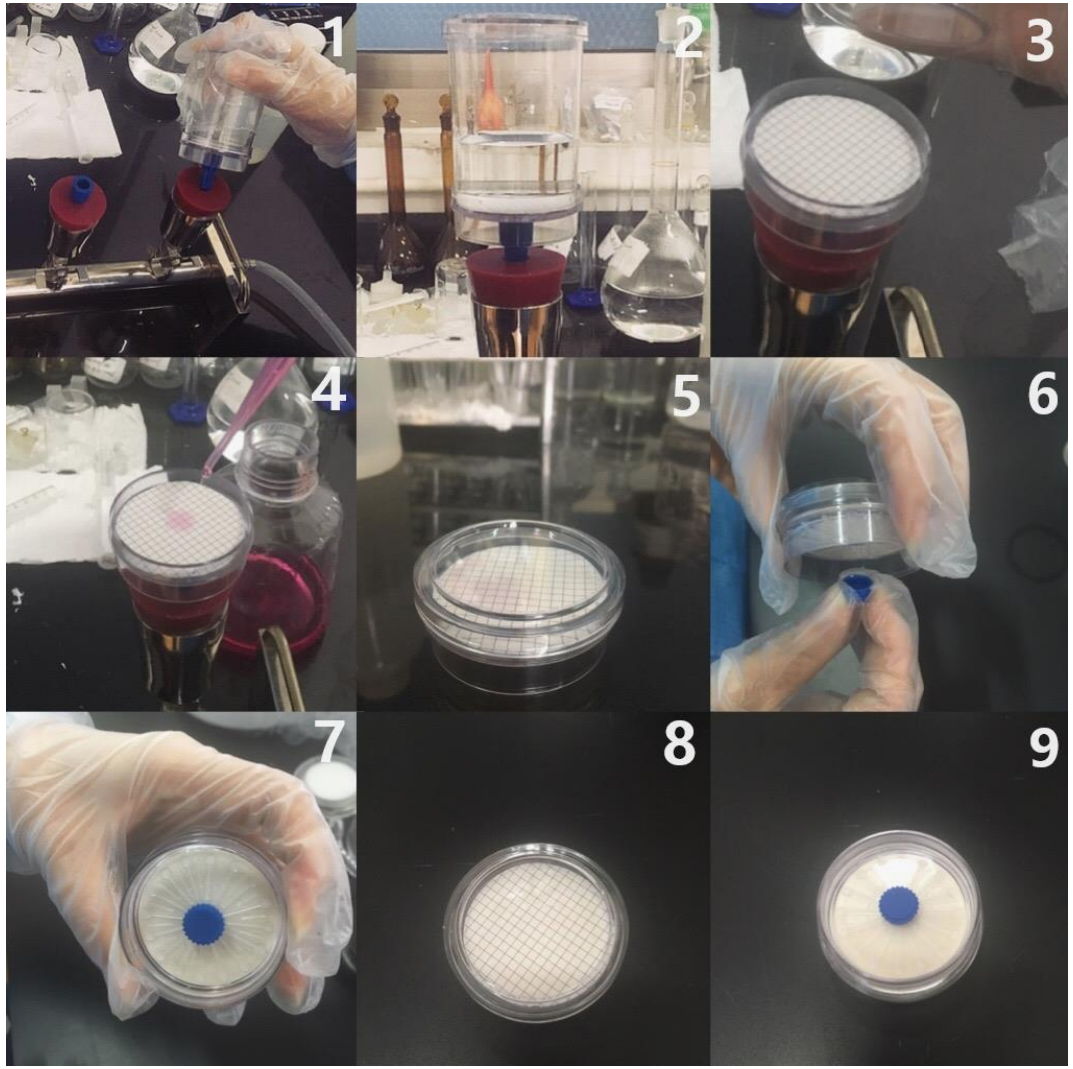


Open the package and fit the Bioset Monitor on to the manifold or flask.

Open the Bioset Monitor; pour in the liquid to be analyzed; open the vacuum valve to initiate filtration.

Once filtration is complete, remove the Bioset Monitor funnel to expose the gridded side of the membrane.

Add growth media to gridded side of membrane.

Cover the exposed membrane with the provided cap and seal the downstream outlet of the base with the included blue cap.

Place in an incubator for culturing.

Bioset Monitor - Benefits

- Complies with ISO 7704, Most common international standard of evaluation of membrane filters used for microbiological analyses.
- Ready-to-use, disposable, individually sterile packaged.
- All-in-one system: device easily converts to a Petri dish, which can be labeled and incubated for analyses and enumeration.
- Excellent retention and colony growth, high recovery rates of microorganisms
- Gridded lines do not inhibit colony growth.
- Membrane Solutions provides customer / technical support and inventory of Bioset Monitors.

Who are TARGETED customers

Beer testing

Food & Beverage testing

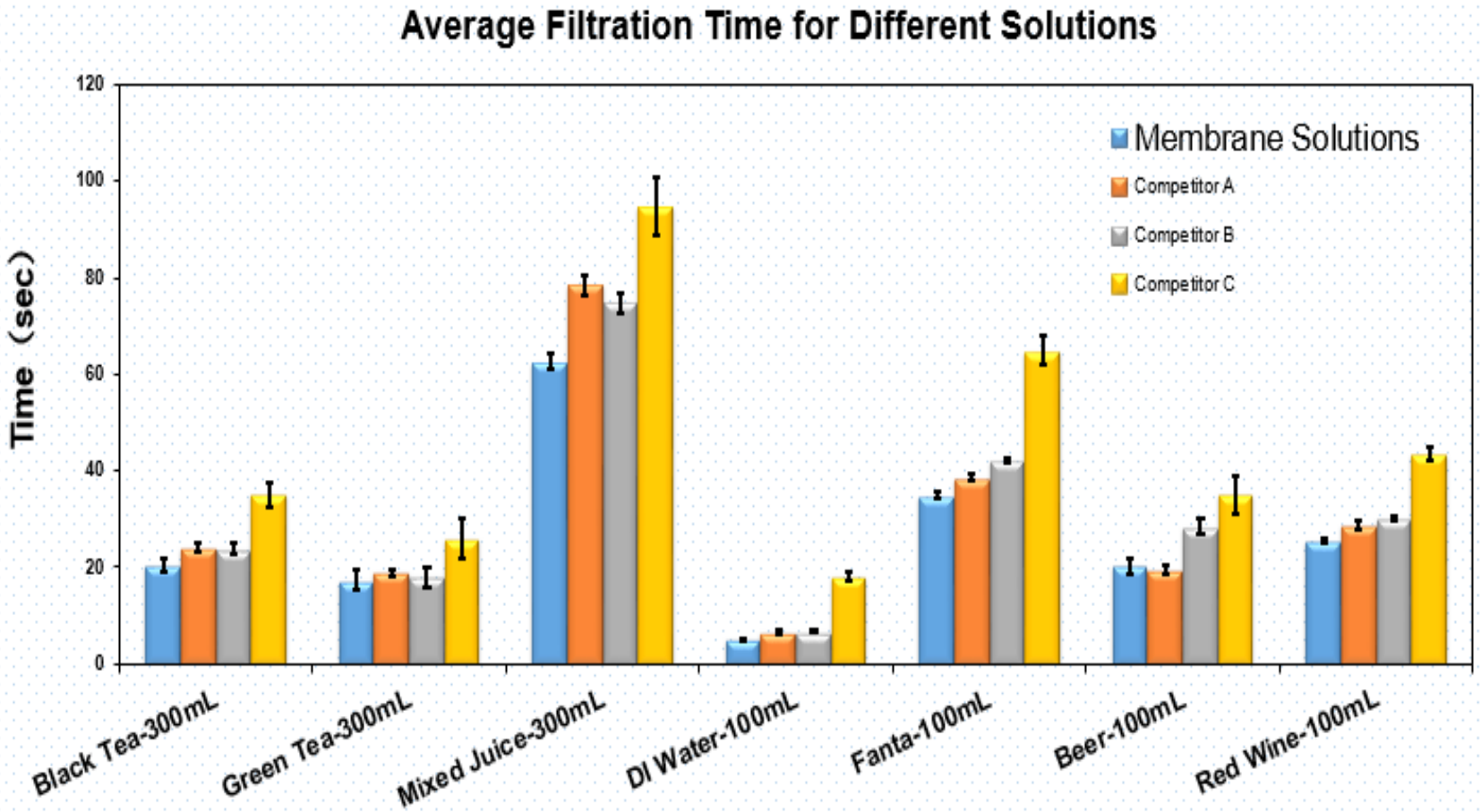
Bottled Water testing

Carbonated Drinks testing

Quality Control

- ✓ Bacterial Challenge: LRV>7（ATCC19146, ATCC14756,ASTM bacterial challenge test)for each lot of 0.2um and 0.45um products.
- ✓ Bacterial Endotoxin : < 0.25 EU/mL or < 2.15EU/device (LAL) for each lot of devices.
- ✓ Biosafety: Meets USP<88>Biological Reactivity test for Class VI Plastics.
- ✓ Recovery of Fecal Coliform: ≥90 %.
- ✓ Traceable: All QC data is traceable for each lot from raw material to finished product.
- ✓ Reliably: Each lot of products are tested for seal and membrane integrity.
- ✓ ISO 9001 Quality Standard

Flow Rate Comparison of MCE membranes



High Flowrate MCE membrane provides short filtration times for water, beer, wine, juice and other beverages saving time especially for multiple samples

Recovery Rate Comparison (the higher the better)

Microbiological Recovery Comparison using E.coli and Saccharomyces cerevisiae			
Sample	E.coli ATCC#11775 Percent Recovery (R)	Saccharomyces cerevisiae ATCC#7754 Percent Recovery (R)	Meets ISO7704 Requirements (R⩾80%)
Membrane Solutions	**93%**	**94%**	**Yes**
Competitor A	92%	89%	Yes
Competitor B	90%	93%	Yes
Competitor C	79%	81%	No

Results and discussion

The requirements set forth by ISO 7704 have all been met. All MS filter products tested in this study achieved at least 90% recovery for the two organisms used: Escherichia coli and Saccharomyces cerevisiae.

Conclusion

Membrane Solutions Analytical Filter Units and Filter Funnels with MCE membranes pass the microbial recovery requirements set forth in ISO 7704. Their performance in this application makes them an excellent choice for use in water quality testing.

References

International Standard ISO 7704 - 1985 (E). Water Quality – Evaluation of membrane filters used for microbiological analyses. International Organization for Standardization. First Edition – 1985-03-15.

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