

EZ-Pak[®] Dispenser and Membranes

Dispense sterile membranes
immediately with contamination-free
and hands-free convenience



The easiest way to work with filter discs

The EZ-Pak® System revolutionized filter handling by combining the benefits of ready-to-use, sterile, individually-packed membranes with a unique dispenser. By simply depressing the dispenser's lever, the sterile membrane is unwrapped from its package for easy access.

Meets regulatory guidelines

The EZ-Pak® dispenser and membranes will add safety and convenience to your work

Beer, wine and soft drinks

- Green membranes are ideal for spotting small, clear, translucent colonies typically found in bottled water and beer
- Black membranes facilitate the counting of yeast and mold colonies

Hospitals and pharmacies

- Ideal for processing large numbers of samples rapidly
- Black membranes facilitate the counting of *Legionella sp.*

Drinking water, bottled water and mineral water

The EZ-Pak® system features Merck Millipore's mixed esters of cellulose membranes, which are suitable for testing drinking, bottled and mineral water according to international standards.

United States

- Standard Methods for the Examination of Water and Wastewater 20 Edition, 1998

Europe

- EEC Directive 96/70/EC, 28 October 1996, amending Directive 80/777/EEC relating to the exploitation and marketing of natural mineral waters
- EEC Directive 98/83/EC, 3 November, 1998, relating to the quality of water intended for human consumption
- DIN EN 12780: 2002 – Water quality – Detection and enumeration of *pseudomonas aeruginosa* by membrane filtration

Globally

- WHO Guidelines for Drinking Water Quality, 2011, 4th edition

ISO Regulations

- ISO 11731, Water quality: Detection and enumeration of *Legionella spp.*, 1998 and 2004 (Part 2)
- ISO 8199:2005: Water quality – General guidance on the enumeration of microorganisms by culture
- ISO 7899-2:2000: Water quality – Detection and enumeration of intestinal *enterococci* – Part 2: Membrane filtration method
- ISO 9308-2:2012: Water quality – Detection and enumeration of coliform organisms, thermotolerant coliform organisms and presumptive *Escherichia coli* – Part 2: Multiple tube (most probable number) method
- ISO 6340:1995: Water Quality – Detection of *salmonella* species
- ISO 6461-2:1986: Water quality; detection and enumeration of the spores of sulfite-reducing anaerobes (clostridia); Part 2: Method by membrane filtration
- ISO 7704:1985: Water Quality – Evaluation of membrane filters used for microbiological analyses

Wide variety of membranes

EZ-Pak® membranes are available in pore sizes ranging from 0.2 µm to 0.8 µm; in diameters of either 47 mm or 50 mm (0.45 µm); and in a choice of colors: white, black or green (0.45 µm). To facilitate traceability, the membrane catalogue number, lot number, pore size and sequential number (from 1 to 150) are printed on the clear, protective cover of every membrane cell. There are no protective papers to remove, so the dispensed membrane is ready for testing. With all individually-sealed membranes, some sort of adhesive is used to seal the protective film to the paper backing. However, if precautions are not taken by the manufacturer, the adhesive will be in prolonged contact with the filter. The adhesive can then migrate onto the filter and inhibit microbial growth. To avoid this problem, Merck Millipore only applies adhesive on the blue band away from the filter disc.



Convenient dispenser

Not only does the dispenser make your work easier by opening filter packages, it also reduces the risk of accidental contamination.

- **Saves time** – press the lever to unwrap one sterile membrane ready to be handled with forceps, even while wearing gloves
- **Easy to handle** – because there are no protective papers, it's easy to remove the filter with forceps
- **Reduces the risk of accidental contamination** – your fingers never come close to the filter
- **Lightweight and portable** – the dispenser weighs only 6 pounds (2.4 kg) so it can be easily moved between lab benches
- **No electrical connection** – the dispenser is maintenance-free and suitable for field use

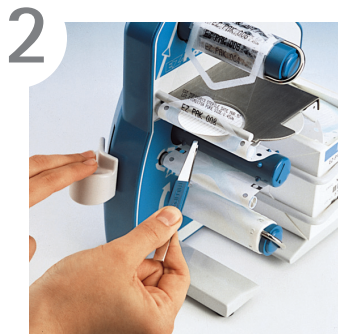
Filtration made simple

For the ultimate in convenience and efficiency, combine the EZ-Pak® system with the Microfil® filtration system. The Microfil® system includes ready-to-use, sterile filtration funnels loaded into a convenient dispenser coupled with a unique filtration support to facilitate sample processing. No preparation steps are required. The unique "push-fit" funnel ensures perfect sealing without clamps.

All it takes is one finger to ...



1 Dispense a sterile Microfil® funnel



2 Dispense a sterile EZ-Pak® membrane

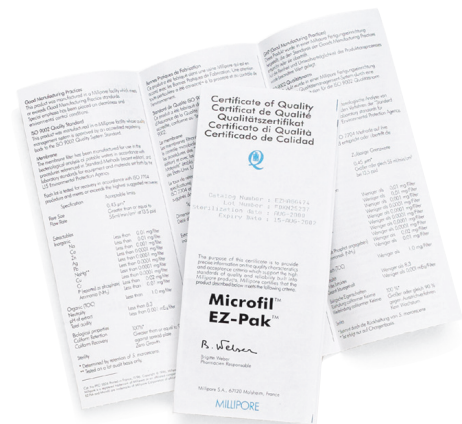


3 Lift the membrane for convenient removal after filtration

Detailed Certificate of Quality

Each lot of membranes is subjected to a battery of quality control tests including pore size, flow rate, extractables, retention, recovery and sterility. These test specifications are listed on the Certificate of Quality included in every box.

In addition, the membranes are manufactured in an Merck Millipore facility that meets or exceeds GMP standards and whose quality management system is ISO® 9001 approved. The facility has an extensive quality control documentation system that allows us to trace products at each step of the manufacturing process from raw materials through finished goods.



▶ **Green membranes**

Applications:

Bacteria in bottled water, beer

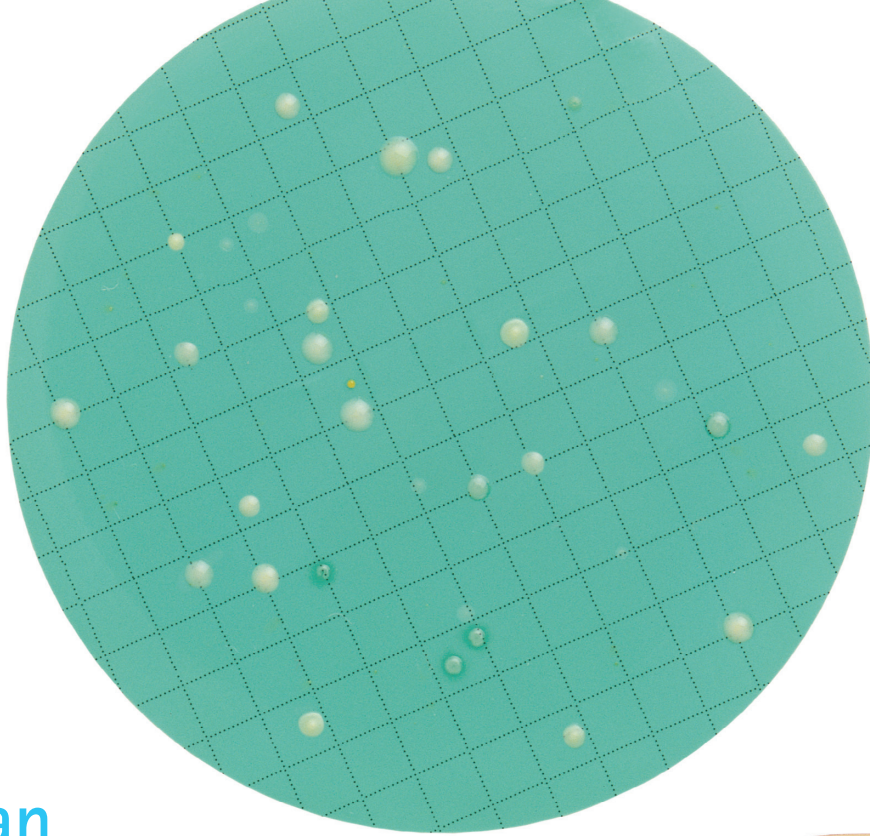
Examination of:

Clear, translucent colonies

Diameter:

47 mm Diameter

50 mm Diameter



▼ **White membranes**

Applications:

General Purpose

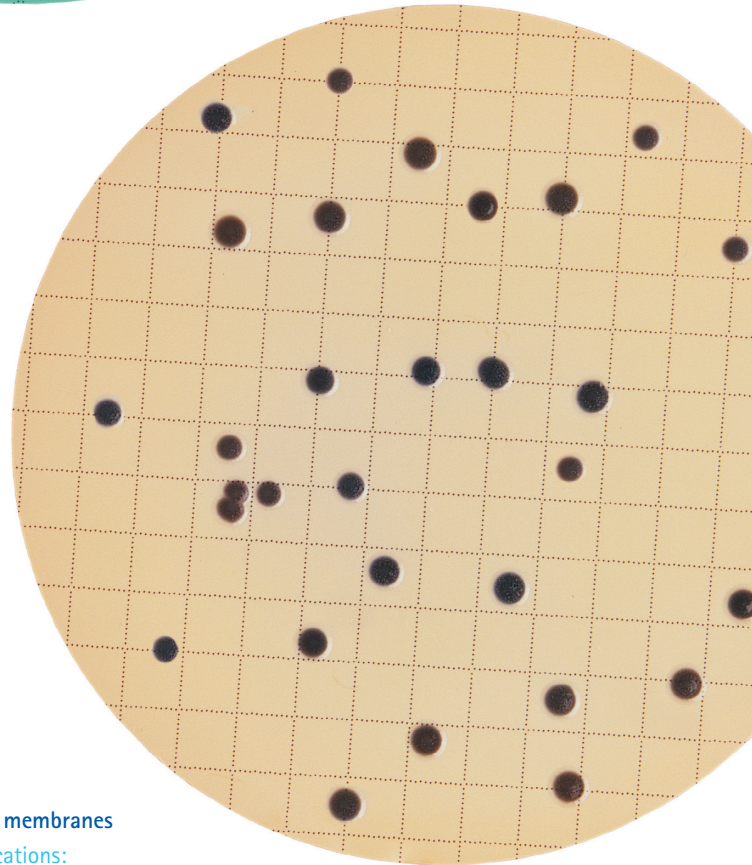
Examination of:

All microorganisms

Diameter:

47 mm Diameter

50 mm Diameter



◀ **Black membranes**

Applications:

Analysis of yeast and mold and

Legionella sp.

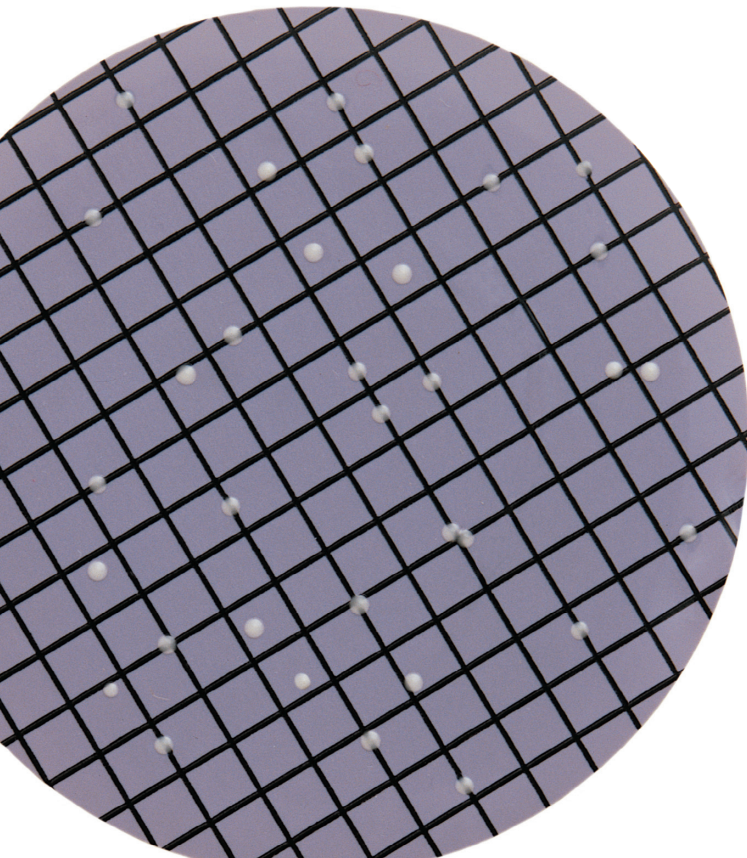
Examination of:

White, beige colonies

Diameter:

47 mm Diameter

50 mm Diameter



There is an
EZ-Pak[®] Membrane
for every application

EZ-Pak® Dispenser specifications

Materials

Dispenser casing: Stainless steel with epoxy-based paint finish, and Ultem® resin

Rollers: Ultem® resin

Mechanics: Cast aluminum, Victrex®-Peek™ polymer

Dimensions

Height: 240 mm (9.5 in.);

Width: 160 mm (6.333 in.);

Depth: 235 mm (9.25 in.).

Weight

2.4 kg (about 5.5 lbs)



EZ-Pak® dispenser and new
EZ-Stream™ vacuum pump

Ordering information

EZ-Pak® Membrane Dispenser

Description	Qty/Pk	Catalogue No.
EZ-Pak® Membrane Dispenser	1 each	EZDI SPO 01

EZ-Pak® Membranes, gridded

Filter Color	Pore Size (µm)	Filter Diameter (mm)	Qty/Pk	Catalogue No.
White	0.22	47	4 bands x 150 filters	EZGS WG4 74
White	0.45	47	4 bands x 150 filters	EZHA WG4 74
White	0.45	50	4 bands x 150 filters	EZHA WG5 04
White	0.7	47	4 bands x 150 filters	EZHC WG4 74
White	0.8	47	4 bands x 150 filters	EZAA WG4 74
Green	0.45	47	4 bands x 150 filters	EZHA GG4 74
Green	0.45	50	4 bands x 150 filters	EZHA GG5 04
Black	0.45	47	4 bands x 150 filters	MSP0 008 14
Black	0.45	50	4 bands x 150 filters	EZHA BG5 04
Black	0.8	47	4 bands x 150 filters	EZAA BG4 74

EZ-Pak® Membranes and Microfil® Funnels

(150 sterilized, gridded membranes with 150 sterilized funnels)

Filter Color	Pore Size (µm)	Filter Diameter (mm)	Funnel Volume (mL)	Catalogue No.
White	0.22	47	100 mL funnels	MZGS WG1 01
White	0.45	47	100 mL funnels	MZHA WG1 01
White	0.8	47	100 mL funnels	MZAA WG1 01
Black	0.45	47	100 mL funnels	MZHA BG1 01
Black	0.8	47	100 mL funnels	MZAA BG1 01
White	0.45	47	250 mL funnels	MZHA WG2 51
White	0.8	47	250 mL funnels	MZAA WG2 51
Black	0.45	47	250 mL funnels	MZHA BG2 51

Related Products

EZ-Stream™ Vacuum Pump for Liquid Transfer	EZSTREAM1
3-Position Vacuum Manifold, complete with Microfil® supports	MIAC03P01
1-Position Vacuum Manifold, complete with Microfil® supports	MIAC01P01
100 mL Microfil® funnel dispenser	MIACFD101
250 mL Microfil® funnel dispenser	MIACFD201



We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

For more information on our products:
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices

For Technical Service, please visit:
www.merckmillipore.com/techservice



Merck KGaA
Frankfurter Straße 250
64293 Darmstadt, Germany
e-mail: mibio@merckgroup.com