

# MicropreSure™ In-Line Filtration Samplers

**Ready-to-use devices sample and test in-process bottled water**

- ▶ *Fast and Reliable In-Process Collection*
- ▶ *Closed Design for Accurate Sampling*
- ▶ *Less Equipment to Handle*
- ▶ *Sampling and Filtration in One Step*
- ▶ *Convenient, In-Process Microbiological Analysis*

QC procedures in water bottling production environments keep water standards high. Traditional multi-step sampling methods are often inconvenient and a potential problem for time-pressed QC employees. The routine of setting up lab equipment, then performing delicate manipulations to process samples can be rushed, sometimes at the expense of proper aseptic procedures.

By reducing the sampling process to a few simple steps performed within a closed system, the new MicropreSure In-Line Filtration Sampler improves in-process microbiological testing for bottled water producers.

## **Saves Steps, Speeds In-Process Sampling**

The MicropreSure In-Line Filtration Sampler saves steps and speeds sampling, providing an easy tool to track the cleanliness of bottled water production lines. It uses the pressure in tanks or pressurized lines to process and collect samples through a micro-porous membrane within an enclosed chamber. And because the In-Line Filtration Samplers are securely locked together, sampling pressurized water lines will not create water leaks.

## **No Risk of External Contamination**

MicropreSure In-Line Filtration Samplers are closed throughout the entire test, so there's no risk of adventitious contamination while sampling in a production environment. Organisms are captured on the membrane right at the collection site, ensuring a representative sample and reliable test results. Membrane handling is minimal, so operator skill and environmental control are less critical.

## **Less Equipment to Handle**

MicropreSure In-Line Filtration Samplers are shipped ethylene oxide (ETO) sterilized and ready-to-use. Operators won't need to sterilize bulky sample containers and transport them back to the lab. After processing, microbes are contained and protected within the lightweight MicropreSure devices that are easily carried.

## **Continuous On-Line Sampling**

A limited 100 mL sample may not reveal all microbial contaminants in a water sample. The MicropreSure In-Line Filtration Sampler processes any volume sample through its enclosed housing. In addition, the strong fit between the luer fitting and the sanitary sampling valve means you can continuously sample over an extended period of time. Results can then reflect the average contamination over a batch, a shift, or a day.



## Convenient, In-Process Microbiological Analysis

As a leader in developing innovative tools for microbiological analysis, Millipore introduces a convenient tool that allows water samples to be aseptically prepared, right at the collecting site. The membrane, enclosed in its own housing, is protected until it is ready to be processed in the laboratory.

## MicropreSure In-Line Filtration Samplers Obsolete Traditional Multiple-step Methods:

- No Assembly
- No Sterilization
- No Sample Containers to Transport
- No Risk of External Contamination

### In-Process Water Analysis

Fast and easy preparation of in-process water samples using the MicropreSure device.



1. *Sample* directly through the MicropreSure In-Line Filtration Sampler via the sanitary sampling valve.



2. *Access* the membrane by connecting the MSOpener™ to a vacuum source, and placing the MicropreSure In-Line Filtration Sampler on top of the MSOpener.



3. *Incubate* the membrane by lifting the membrane and transferring it onto a media plate.

## Specifications

### Dimensions

<i>In-Line Filtration Sampler Height:</i>	45 mm (1.75")
<i>Filter Diameter:</i>	47 mm
<i>Filter Area:</i>	9.10 cm <sup>2</sup>
<i>Filter Pore Size:</i>	0.45 µm pore size
<i>Pressure Limit at 25 °C:</i>	3 bar/liter/min.
<i>Pressure Limit at 90 °C:</i>	1 bar/liter/min.
<i>Temperature Range:</i>	5 °C - 90 °C

### Materials

<i>Filtration Chamber/Base:</i>	Polycarbonate
<i>Membrane:</i>	Mixed esters of cellulose, white, gridded
<i>Filtration Support:</i>	Tenax® mesh spacer

This Millipore product is manufactured in accordance with a Quality Management System that is approved by an accredited registering body to the appropriate ISO9000 Quality Systems Standard.

## Ordering Information

Description	Qty/Pk	Catalogue No.
MicropreSure In-Line Filtration Sampler Sterilized, 0.45 µm, white, gridded	48	MSHA WGT 48

### MSOpener

Complete vacuum manifold for accessing membrane	1	MSOP ENR 01
MSOpener tulip for mounting on Standard 3 or 6-place manifold	1	MSOP NMS 01
Sterile Sampling Tube with Luer Fitting	100	M000 000 01

### Identifying the Sampling Port Outlet and Choosing the Valve Adapter:

- If the sampling port outlet is a male luer port (such as an ESP or Milliflex™-P valve), use the MicropreSure In-Line Filtration Sampler without a sampling port adapter.
- If the sampling port outlet has a Tri-Clover® connection, install a MicropreSure sanitary sampling valve. Use the correct valve as follows:

Valve	Connection Size	Catalogue No.
Tri-Clover	1 1/2"	MSES PTC L1
NPT	1/4"	MSES P14 N1
NPT	1/8"	MSES P18 N1

Valve Adapter	Outer Diameter	Catalogue No.
Simple tubing	3 mm	MSOS T03 03
	6 mm	MSOS T06 03
	8 mm	MSOS T08 03
	12 mm	MSOS T12 03
	20 mm	MSOS T20 03
	3/16"	MSST 316 03
	1/4"	MSOS T14 03
	3/8"	MSOS T38 03
Male threaded connection	1/8" Gas	MSFM 18G 03
	1/8" NPT	MSFM 18N 03
	1/4" Gas	MSFM 14G 03
	1/4" NPT	MSFM 14N 03
Female threaded connection	1/8" Gas	MSLM 18G 03
	1/8" NPT	MSLM 18N 03
	1/4" Gas	MSLM 14G 03
	1/4" NPT	MSLM 14N 03
Tri-Clover	3/4"	MSOT C34 03
	Mini Clamp	MSOT CMC 03
	1 1/2"	MSTC 120 03

## **To Place an Order or Receive Technical Assistance**

For additional information call your  
nearest Millipore office:

In the U.S. and Canada, call toll-free  
**1-800-MILLIPORE (1-800-645-5476)**

In the U.S., Canada and Puerto Rico,  
fax orders to **1-800-MILLIFX  
(1-800-645-5439)**

Internet: [www.millipore.com](http://www.millipore.com)

E-mail: [tech\\_service@millipore.com](mailto:tech_service@millipore.com)

Millipore is a registered trademark of Millipore  
Corporation.

MicropreSure, Milliflex and MSOpener are  
trademarks of Millipore Corporation.

Tenax is a registered trademark of Tenax S.p.A.

Tri-Clover is a trademark of Ladish Corporation.

ISO is a trademark of the International Organization  
for Standardization.

Lit. No. DS1651EN00 Rev. 11/01 01-233

Printed in U.S.A.

Copyright 2001, Millipore Corporation, Bedford, MA.  
All rights reserved.

**MILLIPORE**