User Guide

Millex®-GP Sterile Filter

- Single use only
- Sterile
- Non-pyrogenic

SLMPR25SS

For research use only.

Indications for Use/Purpose

The Millex®-GP sterile filter is a device intended for use as a syringe filter to sterilize and/or clarify low volume aqueous solutions.

Introduction

This document provides compatibility information, operating steps, and specifications for the Millex®-GP Sterile Filter. The Millex®-GP Sterile Filter removes microorganisms, particles, precipitates, and undissolved powders larger than 0.22 micron (µm) from aqueous solutions. This single-use product consists of a modified polyethersulfone (PES) membrane filter, Millipore Express® PES, sealed in a polyvinyl chloride (PVC) housing. It is non-pyrogenic and non-toxic.

Applications

Millex®-GP syringe filters can be used to sterile filter small volumes of protein, culture media, diagnostic imaging agents, or aqueous solutions.

Chemical Compatibility

The Millex®-GP filter is compatible with most aqueous solutions. Based on information from technical publications, materials suppliers, and laboratory tests, we believe that the agents listed in the following chart are safe to use with Millex®-GP filter. However, because of the effects of variability in temperature, concentrations, duration of exposure, and other factors outside of our control, we do not provide or imply a warranty with respect to this information. For example, the material list refers to the compatibility between the sample and filter materials. It does not refer to the sample or protein binding to the filter, or the potential loss of the reactive component during filtration. You should qualify specific sample component for protein binding or loss of reactive component prior to use. Agents that are not listed should be tested prior to use.

Chemicals

Acetic acid (5%)
Aqueous buffers
Cell culture media
Clorox® bleach (5% solution)
Sodium hydroxide (10%)
Sulfuric acid (20%)
Water

Reactive Compounds

Reactive Compound	Comments
Ampicillin	water soluble
Aspartame	water soluble
Caffeine	water soluble
Factor III	water soluble
Factor IX	water soluble
Folic Acid	water soluble
Gentamicin	water soluble
Heparin	water soluble
Immunoglobulins	water soluble
Insulin	water soluble
Mannitol	water soluble
Norepinephrine	water soluble
Penicillin G potassium	water soluble
Protamines	water soluble

How to Use the Millex® Sterile Filter

WARNINGS

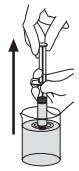
- To ensure sterility, do not use this product if the package is damaged.
- Do not use this product as an in-line filter; it was not designed for long-term continuous use.
- Do not use with syringes smaller than 10 mL because pressures in excess of the maximum pressure rating may be reached, potentially causing damage to the filter and/or personal injury.

CAUTIONS

- Do not use the Millex® filter with fluids at temperatures above 45 °C (113 °F).
- Do not use the Millex® filter for emulsions or suspensions because it was not designed for that purpose.
- Do not use the Millex® filter for solutions containing 5 milligrams (mg) or less of proteins or reactive materials unless binding studies have been performed.
- Do not re-sterilize or reuse the Millex® filter, as we cannot assure the sterility, integrity, and performance beyond a single use.
- Do not use the same Millex® filter to filter solutions in both directions.

Procedure for Using the Millex® Sterile Filter

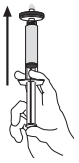
1. Fill syringe with solution to be filtered.



2. Aseptically remove cover from package.

3. Attach syringe to filter and remove assembly from package. Attach needle to Luer-slip outlet if necessary.

4. Hold syringe with filter (and needle if attached) pointing up and top off by pushing a few drops through. Do not contaminate underside of filter with fingers.



5. Insert needle (if attached) and push plunger to deliver filtered solution.

Specifications

Materials	
Membrane	Hydrophilic Millipore Express® PES polyethersulfone
Pore size	0.22 µm
Housing	Polyvinyl chloride (PVC)
Dimensions	
Inlet to outlet	25 mm (0.98 in.)
Diameter	29 mm (1.14 in.)
Filtration area	4 cm^2 (0.62 in^2)
Temperature limit	45 °C (113 °F) maximum
Pressure limit at 21 °C	5.2 bar (75 psi) inlet and differential maximum
Filtration volume	1 mL to 100 mL
Hold-up volume	≤ 0.1 mL after air purge
Sterilization method	Ethylene oxide gas
Connections	Female Luer-Lok™ inlet Male Luer-slip outlet
Flow rate at 2.1 bar (30 psi), 21 °C	≥ 175 mL/min

Symbol Definitions

Symbol	Definition	Symbol	Definition
REF	Catalogue number		Date of manufacture
	Do not reuse		Manufacturer
	Use-by date		Do not use if package is damaged
LOT	Batch code	STERILE EO	Sterilized using ethylene oxide

Notice

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