User Guide

Millex®-SV Filter

REF **SLSV0R25LS**

• 25 mm • Sterile • Single use • Non-Pyrogenic • For research use only • 50 pack

Introduction

The bi-directionally supported Millex®-SV device is a low-binding, syringe-operated filter for the filtration of aqueous, proteinaceous solutions where minimal sample loss is desired. It will remove particles, precipitates, and undissolved powders larger than 5.0 µm. The sterile Millex®-SV filter is non-pyrogenic and non-toxic. This single-use filter consists of a 5.0 µm Durapore® polyvinylidene (PVDF) membrane sealed in a polyvinyl chloride (PVC) housing. Typical applications include particle or aggregate removal from protein solutions such as monoclonal antibodies, extracted cellular or tissue-based solutions, hormones, and reactive materials.

Chemical Compatibility

The Millex®-SV filter is compatible with most aqueous solutions. It may be used to filter the agents listed below. This guide has been developed from technical publications, materials suppliers, and laboratory tests, and is believed to be reliable. However, because of variability in temperature, concentrations, duration of exposure, and other factors outside of our control which may affect the use of the filter, no warranty is given or is to be implied with respect to such information.

Agents not listed below should be tested with the Millex®-SV filter prior to use.

Acetic acid (5%)
Ammonium hydroxide (6 N)
Amyl alcohol
Benzyl alcohol (1%)
Boric acid
Brine (sea water)
Butyl alcohol
Ethyl alcohol
Ethylene glycol[1]
Formaldehyde[1]
Gasoline[1]
Glycerine (glycerol)
Helium (gas)
Hydrochloric acid (6 N)
Hydrogen (gas)
Hydrogen peroxide (90%)
HYPO (photo)
Isobutyl alcohol[1]
Isopropyl alcohol[1]
Kerosene[1]
Methyl alcohol[1]
Nitrogen (gas)
Paraldehyde[1]
Petroleum based oils[1]
Petroleum ether[1]
Phenol (0.5%)
Silicone oils
Sodium chloride (aqueous solution)
Sodium hydroxide (3 N)
Sulfuric acid (3 N)[1]

[1] Limited use: Testing recommended.

Directions for Use

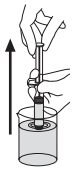
WARNINGS

- 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.
- Syringe filters are for manual use only; do not use on automated systems.
- Sudden loss of pressure could indicate failure of the filter.
- Not suitable for filtering high viscosity solutions or blood.
- Use asceptic technique to maintain sterility removing product from primary package.
- Make sure to wet the filter membrane thoroughly before injecting the solution; improperly wetted filters can become airlocked.

CAUTIONS

- Filter solutions with a temperature limit of 45 °C (113 °F).
- Do not use the same Millex®-SV filter to filter solutions in both directions.
- Do not use the Millex®-SV filter to filter emulsions or suspensions.
- Do not use the Millex®-SV filter to filter 5 mg or less of proteins or reactive materials unless binding studies have been performed.
- Discard appropriately after single use. See "Disposal" section.
- Single use only; do not re-use or resterilize.

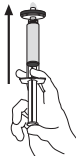
1. Fill syringe with solution to be filtered.



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. ⚠ Excess solution may be hazardous and should be disposed with care.



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

Specifications

Materials	
Membrane	Hydrophilic Durapore® polyvinylidene fluoride (PVDF), Type SV
Pore size	5.0 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)
Pressure limit at 21 °C	5.2 bar (75 psi) inlet and differential
Filtration volume	1–100 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	≥ 600 mL/min

Symbol Definitions

Symbol	Definition	Symbol	Definition
	Non-pyrogenic		Caution
	Do not re-use		Date of manufacture
	Catalogue number		Manufacturer
	Batch code		Do not use if package is damaged
	Temperature limit		Sterilized using ethylene oxide
	Use-by date		

Disposal

Follow precautions for disposal of items contaminated with potentially infectious or hazardous material according to all applicable international, federal, state, and local regulations.

Notice

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