User Guide

Millex®-FG Vent with Needle

REF **SLFGNR25VS**

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

Introduction

The bi-directionally supported Millex®-FG Vent with Needle contains a 0.2 µm hydrophobic Fluoropore™ polytetrafluoroethylene (PTFE) membrane, sealed in a polyvinyl chloride (PVC) housing, and equipped with a needle on the outlet. It is non-pyrogenic and non-toxic. It is ideal for venting containers, sterilizing air and gasses, and liquids that are not compatible with standard membrane filters (alcohols, concentrated acids, and bases). It is suitable for removing microorganisms, particles, precipitates, and undissolved powders larger than 0.2 µm.

Chemical Compatibility

The Millex®-FG filter is compatible with mild organic and organic aqueous solutions or air and gas. 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, no warranty is given or is to be implied with respect to such information. Agents not listed below should be tested with the Millex®-FG filter prior to use.

Acetic acid (glacial)
Acetic acid (5%)
Aliphatic ethers
Ammonium hydroxide (6 N)
Amyl acetate
Amyl alcohol
Benzyl alcohol (1%)
Boric acid
Brine (sea water)
Butyl alcohol
Carbon tetrachloride
Ethyl alcohol
Ethylene glycol
Formaldehyde
Glycerine (glycerol)
Helium (gas)
Hexane
Hydrochloric acid (1 N)
Hydrogen (gas)
Hydrogen peroxide (90%)
Hypo (photo)
Isobutyl alcohol
Isopropyl alcohol
Methyl alcohol
Nitrogen (gas)
Paraldehyde
Petroleum based oils
Phenol (0.5%)
Silicone oils
Sodium hydroxide (3 N)

Directions for Use

WARNINGS

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

CAUTIONS

- Single use only; do not re-use or resterilize.
- This product is not suitable for filtration of aqueous solutions unless properly prewetted.
- Filter solutions with a temperature limit of 45 °C (113 °F).
- Do not use the Millex®-FG filter to filter 5 mg or less of protein-containing solutions or reactive materials unless binding studies have been performed.
- Do not use the same Millex®-FG filter to filter solutions in both directions.
- Take care to avoid needle injury during handling.
- Use aseptic technique to maintain sterility removing product from primary package.
- Sudden loss of pressure could indicate failure of the filter.
- During venting, if aqueous liquid enters the unit and fill the housing, the hydrophobic filter blocks the passage of air. Replace with new device if necessary.
- Discard appropriately after single use. See "Disposal" section on next page.

Vent Filter Procedure

Use aseptic technique.

1. Spike the Millex®-FG vent needle into the vial (push the needle only partially through, so its opening is exposed in the vial). If venting only, stop here.
2. Fill a syringe with diluent.
3. Add diluent to the vial.
4. Push the Millex®-FG vent filter needle into the vial up to the hub of the needle.
5. Hold the syringe, vial, and Millex®-FG vent filter with needle, and agitate the vial to reconstitute the sample.
6. Invert the vial and draw the sample into the syringe.
7. Push any air out of the syringe, then remove the syringe from the vial.
8. Discard according to local guidelines. See "Disposal" section.

Syringe Filter Procedure

Use aseptic technique.

1. Fill the syringe with the solution to be filtered.
2. Attach the syringe to the Millex®-FG Vent with Needle.
3. Hold the syringe vertically with the filter pointing upward and top it off by pushing a few drops through the filter. ⚠ Excess fluid may be hazardous and should be disposed of with care.
4. Place the filter assembly over the appropriate container and push the syringe plunger to deliver the filtered solution into the container.
5. Discard according to local guidelines. See "Disposal" section.

Specifications

Materials	
Membrane	Hydrophobic Fluoropore™ polytetrafluoroethylene (PTFE), Type FG
Pore Size	0.2 µm
Housing	Polyvinyl chloride (PVC)
Needle	Stainless steel
Dimensions	
Inlet to outlet	61 mm (2.4 in.) including needle
Diameter	28 mm (1.1 in.)
Filtration area	4 cm^2 (0.62 in^2)
Temperature limit	45 °C (113 °F)
Maximum inlet pressure	2 bar (29 psi)
Sterilization method	Ethylene oxide gas
Connections	Female Luer-Lok™ inlet Male Luer-slip outlet with needle

Symbol Definitions

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

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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