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



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.
- 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
8	Do not re-use	M	Date of manufacture
REF	Catalogue number		Manufacturer
LOT	Batch code		Do not use if package is damaged and consult instructions for use
1	Temperature limit	STERILEEO	Sterilized using ethylene oxide
	Use-by date	\wedge	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

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.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page on our web site at <u>SigmaAldrich.com/TechService</u>.

Terms and Conditions of Sale

Warranty, use restrictions, and other conditions of sale may be found at <u>SigmaAldrich.com/Terms</u>.

Contact Information

For the location of the office nearest you, go to <u>SigmaAldrich.com/Offices</u>.

MilliporeSigma, Millipore, Millex, Fluoropore, and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. © 2023 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.