

User Guide

Millex®-GS Vented Sterilizing Filter

- Single use only
- Sterile
- Non-pyrogenic

SLGSVR255F

For research use only.

Indications for Use/Purpose

The Millex®-GS Vented Sterilizing filter is intended for use as a syringe filter to sterilize low volume aqueous solutions in research applications.

Introduction

The Millex®-GS Vented Sterilizing filter is a sterilizing filter for aqueous solutions dispensed with a syringe. It will remove microorganisms, particles, precipitates, and undissolved powders larger than 0.22 micron (µm). The sterile Millex®-GS Vented Sterilizing filter is non-pyrogenic and non-toxic. This single-use product consists of a 0.22 µm membrane filter sealed in a plastic housing. A 0.03 µm hydrophobic filter in the dome prevents air locking by automatically venting air introduced upstream. Typical research laboratory applications include the sterile filtration and/or clarification of protein solutions, antibodies, tissue culture media, additives, buffers, and water.

Chemical Compatibility

The Millex®-GS Vented Sterilizing 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 unit, no warranty is given or is to be implied with respect to such information.

Agents that are not listed below should be tested with the Millex®-GS Vented Sterilizing filter prior to use.

| | |
|----------------------------------|----------------------|
| Acetic acid (5%) | Hydrogen (gas) |
| Aliphatic ethers | Hypo (photo) |
| Ammonium hydroxide (6 N) | Isobutyl alcohol |
| Benzyl alcohol (1%) | Isopropyl alcohol |
| Boric acid (aqueous solution) | Kerosene |
| Brine (sea water) | Mineral spirits |
| Butyl alcohol | Nitrogen (gas) |
| Freon® solvent, | Pentane |
| Trichlorotrifluoroethane (TF) or | Petroleum based oils |
| Precision Cleaning Agent (PCA) | Phenol (0.5%) |
| Glycerine (glycerol) | Silicone oils |
| Helium (gas) | Water (deionized) |
| Hexane | |

Directions for Use

WARNINGS

- To ensure sterility, do not use this product if the package is damaged.
- 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.
- Do not use this product as an in-line filter; it was not designed for long-term continuous use.

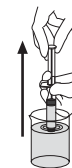
CAUTIONS

- Do not re-sterilize or reuse this filter, as we cannot assure the sterility, integrity, and performance beyond a single use.
- Do not use the Millex®-GS Vented Sterilizing filter at temperatures above 45 °C (113 °F).
- Do not use the Millex®-GS Vented Sterilizing filter for emulsions or suspensions.
- Do not use the Millex®-GS Vented Sterilizing filter for 5 mg or less of protein-containing solutions or reactive materials unless binding studies have been performed.
- Do not use the same Millex® filter to filter solutions in both directions.

Procedure to Attach to a Syringe

Use aseptic technique.

1. Fill syringe with solution to be filtered.



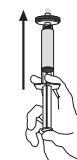
2. Aseptically remove cover from package.



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

| | |
|-----------------|---|
| Filter membrane | Hydrophilic mixed cellulose ester, type GS, pore size 0.22 µm |
| Vent membrane | Hydrophobic PTFE (polytetrafluoroethylene), 0.03 µm |
| Housing | PVC (polyvinyl chloride) |

Dimensions

| | |
|-----------------|---|
| Inlet to outlet | 27 mm (1.06 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 |
|--------------------------------|---|

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|--------------------------|----------|
| Filtration volume | 1–100 mL |
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|-----------------------|--------------------------|
| Hold-up volume | ≤ 0.1 mL after air purge |
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|-----------------------------|--------------------|
| Sterilization method | Ethylene oxide gas |
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| | |
|--------------------|---|
| Connections | Female Luer-Lok™ inlet Male Luer-slip outlet |
|--------------------|---|

| | |
|---|-------------|
| Flow rate at 0.7 bar (10 psi), 21 °C | ≥ 30 mL/min |
|---|-------------|

Symbol Definitions

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

Notice

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Standard Warranty

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