**Description**
The SteriLUX® VMH grade 0.4 μm hydrophilic PVDF filter cartridge is manufactured using high quality components that are nontoxic and biologically inert.

**Materials of Construction**
All components of the SteriLUX® filter cartridge are either animal free or in compliance with EMEA/410/01 Rev. 3 (EDQM 5.2.8 07/2011:50208), and US Code of Federal Regulations 9 CFR 94.18 and 21 CFR 189.5. These materials are listed for food contact use in the Code of Federal Regulations (CFR), Title 21, as below:

<table>
<thead>
<tr>
<th>Membrane:</th>
<th>Polyvinylidene fluoride</th>
<th>CFR Title 21, 177.2510</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream support:</td>
<td>Polypropylene</td>
<td>CFR Title 21, 177.1520</td>
</tr>
<tr>
<td>Downstream support:</td>
<td>Polypropylene</td>
<td>CFR Title 21, 177.1520</td>
</tr>
<tr>
<td>Outer guard:</td>
<td>Polypropylene</td>
<td>CFR Title 21, 177.1520</td>
</tr>
<tr>
<td>Core:</td>
<td>Polypropylene</td>
<td>CFR Title 21, 177.1520</td>
</tr>
<tr>
<td>End caps:</td>
<td>Polypropylene</td>
<td>CFR Title 21, 177.1520</td>
</tr>
<tr>
<td>O-rings:</td>
<td>Typically silicone</td>
<td>CFR Title 21, 177.2600</td>
</tr>
<tr>
<td>Sealing method:</td>
<td>Thermal bonding</td>
<td></td>
</tr>
</tbody>
</table>

**Pore Size**
0.4 μm

**Minimum Bubble Point**
28 psi (1,9 bar), water

**Maximum Diffusion Rate**
1.6 ft² (0,15 m²): 3.0 mL/min @ 22 psi (1,51 bar), water
3.3 ft² (0,31 m²): 6.4 mL/min @ 22 psi (1,51 bar), water

**Typical Water Flow Rate**
0.56 psid/gpm per 5" (1,0 L/min at Δp 10 mbar per 13 cm)

**Bacterial Retention**
>10⁷ per cm² removal of *Serratia marcescens* per modified ASTM F838

**Operating Characteristics**

<table>
<thead>
<tr>
<th>Temperature (°F) @ Pressure (psid)</th>
<th>Flow Rate (mL/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 °F @ 80 psid</td>
<td>150 °F @ 60 psid</td>
</tr>
<tr>
<td>(38 °C @ Δp 5,5 bar)</td>
<td>(66 °C @ Δp 4,1 bar)</td>
</tr>
<tr>
<td>180 °F @ 30 psid</td>
<td>(82 °C @ Δp 2,1 bar)</td>
</tr>
</tbody>
</table>

**Sterilization**
Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles
Steam in place: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles

**Biological Safety**
SteriLUX® filters meet the requirements as specified in the current USP Class VI plastics, physicochemical, oxidizable substances, and cytotoxicity tests. Bacterial endotoxin levels in aqueous extracts of SteriLUX® filters are less than 0.5 EU/mL, as determined using the *Limulus* amebocyte lysate (LAL) test. No binders, adhesives or surfactants are used in the construction of SteriLUX® filters. Filters comply with Commission Regulation (EU) No 10/2011.

**Quality Assurance**
SteriLUX® filters comply with the Food and Drug Administration Code of Federal Regulations, Title 21, Parts 210 and 211. Product is manufactured and packaged in a cleanroom facility that, through voluntary compliance, meets or exceeds FDA Good Manufacturing Practice Standards. To ensure product reliability, Meissner's Quality Assurance staff continually audits the manufacturing process for conformance to its Quality Management System. Each SteriLUX® filter is integrity tested during manufacture and is clearly marked with filter type and lot number.
### Ordering Guide

<table>
<thead>
<tr>
<th>L</th>
<th>VMH</th>
<th>0.4 -</th>
<th>2</th>
<th>P</th>
<th>S</th>
</tr>
</thead>
</table>

#### O-ring Seal Material
- **B**: Buna
- **E**: EPR
- **S**: Silicone
- **T**: Teflon® over Silicone
- **V**: Viton®
- **X**: Teflon® over Viton®

#### Reinforcement Ring Option
- (blank): Standard, no reinforcement ring (not required for P adapter)
- **R**: Reinforcement ring required for autoclave/SIP applications

#### Cartridge Configuration*
- 2: SOE, 222 dual external O-rings
- 6: SOE, 226 dual external O-rings, with locking tabs
- **P**: SOE, 116 single internal O-ring

* See Green Docs for other configurations

#### Cartridge Length
- **2**: 2.5", 1.6 ft² (0.15 m²)
- **5**: 5", 3.3 ft² (0.31 m²)

**Product** | **Filter Grade** | **Retention Rating**
---|---|---
SteriLUX® hydrophilic PVDF membrane | VMH | 0.4

**Additional information about SteriLUX® filter products is available in the Green Docs document which is viewable at https://www.meissner.com/downloads/sterilux-gd003-2.1.pdf**

**SteriLUX is a registered trademark of Meissner Filtration Products.**