The EverLUX® STW0.1 features two serially layered PES hydrophilic membranes with the coarser highly asymmetric upstream layer optimized for protection of the asymmetric 0.1 μm downstream layer. The filter provides the added benefit of certification that meets the critical demands of the pharmaceutical, biotechnology, and related industries.

Materials of Construction
All components of the EverLUX® filter 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>Membranes:</th>
<th>Polyethersulfone</th>
<th>CFR Title 21, 177.2440</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
0.1 μm

Minimum Bubble Point
80 psi (5.5 bar), water
30 psi (2.1 bar), 60% IPA / 40% water
27 psi (1.9 bar), 70% IPA / 30% water

Maximum Diffusion Rate
25 mL/min per 10" @ 40 psi, water (25 mL/min per 25 cm @ 2.8 bar, water)

Typical Water Flow Rate
0.7 psid/gpm per 10" (0.78 L/min at Δp 10 mbar per 25 cm)

Bacterial Retention
>10⁷ per cm² removal of Brevundimonas diminuta per ASTM F838-05

Operating Characteristics
100 °F @ 80 psid (38 °C @ Δp 5.5 bar) 150 °F @ 60 psid (66 °C @ Δp 4.1 bar) 180 °F @ 30 psid (82 °C @ Δp 2.1 bar)

Sterilization
Autoclave: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles. Water wet membrane prior to autoclaving. Steam in place: 121 to 135 °C (15 to 30 psi, 1 to 2 bar), 30 to 60 min, ≥ 3 cycles, water wet membrane first.

Biological Safety
EverLUX® 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 EverLUX® 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 EverLUX® filters. Filters comply with Commission Regulation (EU) No 10/2011.

Quality Assurance
Each EverLUX® STW0.1 is supplied with a Certificate of Quality verifying the high standards and superior performance of the product. EverLUX® 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 EverLUX® filter is integrity tested during manufacture and is clearly marked with filter type and lot number.
## Ordering Guide

<table>
<thead>
<tr>
<th>STW</th>
<th>0.1</th>
<th>-</th>
<th>1</th>
<th>C2</th>
<th>R</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
- R: Reinforcement ring required for autoclave/SIP applications

### Cartridge Configuration
- C2: SOE, 222 O-rings, button cap end
- C6: SOE, 226 O-rings, button cap end
- F2: SOE, 222 O-rings, fin end
- F6: SOE, 226 O-rings, fin end

### Cartridge Length
- 1: 10"
- 2: 20"
- 3: 30"
- 4: 40"

### Filter Grade Retention Rating
- STW: 0.1

Additional information about EverLUX® filter products is available in the Green Docs document which is viewable at https://www.meissner.com/downloads/everlux-gd002-2.1.pdf

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