**EverLUX**

0.2 µm STW-grade Cartridge

**Description**
The EverLUX® STW0.2 features two serially layered, highly asymmetric, PES hydrophilic membranes with the coarser upstream layer optimized for prefiltration and 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>Component</th>
<th>Material</th>
<th>CFR Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membranes</td>
<td>Polyethersulfone</td>
<td>CFR Title 21, 177.2440</td>
</tr>
<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**
0.2 µm

**Maximum Diffusion Rate**
- 30 mL/min per 10” @ 30 psi (30 mL/min per 25 cm @ 2.07 bar), water, air
- 28.7 mL/min per 10” @ 30 psi (28.7 mL/min per 25 cm @ 2.07 bar), water, nitrogen

**Typical Water Flow Rate**
0.43 psid/gpm per 10” (1.3 L/min⁻¹ at Δp 10 mbar per 25 cm)

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

**Operating Characteristics**
- Operating temperature range: 32 °F to 100 °F (0 °C to 38 °C)
- Maximum temperature rating: 180 °F @ 30 psid (82 °C @ 2.1 bar)
- Maximum operating pressure: 80 psid @ 100 °F (5.5 bar @ 38 °C)
- Maximum reverse pressure: 15 psid @ 100 °F (1.0 bar @ 38 °C)

**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 (SIP): 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® STW0.2 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.

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MEISSNER FILTRATION PRODUCTS
Ordering Guide

<table>
<thead>
<tr>
<th>Filter Grade</th>
<th>Retention Rating</th>
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</thead>
<tbody>
<tr>
<td>STW</td>
<td>0.2</td>
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</tbody>
</table>

Additional information about this filter product is available in the EverLUX® Green Docs document at www.meissner.com/green-docs.

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EverLUX is a registered trademark of Meissner Filtration Products.