**Description**
The STyLUX® SM0.4 hydrophilic filter capsule is manufactured using high quality components that are nontoxic and biologically inert.

**Materials of Construction**
All components of the STyLUX® filter capsule are either animal component 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>Membrane</td>
<td>Polyethersulfone</td>
<td>21, 177.2440</td>
</tr>
<tr>
<td>Upstream support</td>
<td>Polypropylene</td>
<td>21, 177.1520</td>
</tr>
<tr>
<td>Downstream support</td>
<td>Polypropylene</td>
<td>21, 177.1520</td>
</tr>
<tr>
<td>Outer guard</td>
<td>Polypropylene</td>
<td>21, 177.1520</td>
</tr>
<tr>
<td>Core</td>
<td>Polypropylene</td>
<td>21, 177.1520</td>
</tr>
<tr>
<td>End caps</td>
<td>Polypropylene</td>
<td>21, 177.1520</td>
</tr>
<tr>
<td>O-rings</td>
<td>Typically silicone</td>
<td>21, 177.2600</td>
</tr>
<tr>
<td>Sealing method</td>
<td>Thermal bonding</td>
<td></td>
</tr>
</tbody>
</table>

**Minimum Bubble Point** 32 psi (2,2 bar), water

**Maximum Diffusion Rate** 25 mL/min per 10" @ 25 psi, water (25 mL min⁻¹ per 25 cm @ 1,7 bar, water)

**Typical Water Flow Rate** 0.13 psid/gpm per 10" (4,2 L min⁻¹ at Δp 10 mbar per 25 cm)

**Operating Characteristics**

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

**Bacterial Retention**
>10⁷ per cm² removal of *Serratia marcescens* per modified ASTM F838-05

**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**
STyLUX® 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 STyLUX® 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 STyLUX® filters. Filters comply with Commission Regulation (EU) No 10/2011.

**Quality Assurance**
STyLUX® 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 STyLUX® filter is integrity tested during manufacture and is clearly marked with filter type and lot number.
Ordering Guide

**SM 0.4 - 1 C2 R S**

**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 Code**

<table>
<thead>
<tr>
<th>Filter Code</th>
<th>Retention Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM</td>
<td>0.4</td>
</tr>
</tbody>
</table>


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