Mini Kleenpak™ capsule with Fluorodyne® II membrane

Description
Pall® Mini Kleenpak capsules with Fluorodyne II membrane are designed for applications where the use of a filter with a low surface area is critical, having a surface area of just 200 cm². The capsules also have a very low hold-up volume of ≤ 6 mL which makes them especially suited to the filtration of high value/low volume products, for replacement of disc filters and for scale-up and scale-down activities, without having product losses during filtration.

They contain the Fluorodyne II PVDF membrane, and are suited to the sterile filtration of products containing low concentration of active ingredients or preservatives.

Key Features
• Low area pleated membrane capsule filter (200 cm² (0.22 ft²) filter area)
• Available presterilized by gamma irradiation or suitable for autoclaving (see Ordering Information table on reverse)
• Very low hold-up volume - typically ≤ 6 mL
• Fluorodyne II membrane with a very high transmission of proteins and preservatives
• A choice of two sterilizing grades: DFL and DJL (0.2 and 0.1 µm) with Fluorodyne II membrane for maximum flexibility and enhanced sterility assurance
• Fluorodyne II grade DJL filters with integral prefiltration layer for long service life
• Fully integrity testable using the forward flow test

High Quality Standards
• Validated with Brevundimonas diminuta (ATCC 19146) at a challenge level of 10⁷ organisms/cm² filter area
• 100% integrity tested during manufacturing
• Integrity test (forward flow) correlated to removal efficiency
• Manufactured under clean conditions in a controlled environment
• Each filter supplied with a Certificate of Test
• Comprehensive validation guide available
Pall Corporation has offices and plants throughout the world in locations including:
Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India,
Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands,
New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain,
Sweden, Switzerland, Taiwan, Thailand, United Kingdom, the United States and Venezuela.
Distributors are located in all major industrial areas of the world.

Visit us on the web at www.pall.com/biopharmaceutical

Because of developments in technology, these data or procedures may be subject to change. Consequently we advise users to review their continuing validity annually.

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**Operating Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Operating Pressure</td>
<td>4.1 bar (60 psi) at 30°C (86°F)</td>
</tr>
<tr>
<td>Max Operating Temperature</td>
<td>80°C (176°F) at 2.1 bar (30 psi)</td>
</tr>
</tbody>
</table>

*In compatible fluids which do not soften, swell or adversely affect the filter or its materials of construction.

**Sterilization**

<table>
<thead>
<tr>
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<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoclave</td>
<td>3 x 1 hour cycles at 140°C (284°F)</td>
</tr>
<tr>
<td>Gamma Irradiation</td>
<td>Up to 50 kGrays</td>
</tr>
</tbody>
</table>

* For G option only
** Consult Pall for more details

Warning: Pre-sterilized units should not be re-sterilized.
This product must not be sterilized in-situ by passing steam through under pressure. Please consult instruction leaflets for fuller recommendations.

**Extractables**

- < 1 mg in water at 20°C (68°F) for non-irradiated filter
- < 5 mg in water at 20°C (68°F) for gamma irradiated filter

**Typical Effective Filtration Area**

200 cm² (0.22 ft²)

**Ordering Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA02DFLP2G</td>
<td>0.2 µm</td>
<td>Non-sterile with filling bell****</td>
</tr>
<tr>
<td>KA02DFLP2S</td>
<td>0.2 µm</td>
<td>Pre-sterilized with filling bell****</td>
</tr>
<tr>
<td>KA02DJLP2G</td>
<td>0.1 µm</td>
<td>Non-sterile with filling bell****</td>
</tr>
<tr>
<td>KA02DJLP2S</td>
<td>0.1 µm</td>
<td>Pre-sterilized with filling bell****</td>
</tr>
</tbody>
</table>

**** Part number represents one box containing 3 Mini Kleenpak filters.
***** The filling bell can be removed easily.

1 bar = 100 KPa