GE Energy

Preveil™ Filtration Membrane Roll Goods

data sheet

Product Type: QP845

Description: Hydrophobic ePTFE Membrane Laminate
Functional Layer: PTFE, HEPA Grade
Backer Material: Polyester

<table>
<thead>
<tr>
<th>Basis Weight:</th>
<th>Nom. 170 g/m²</th>
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<tbody>
<tr>
<td>Air Permeability:</td>
<td>4 – 8 ft³/ft²/min @ 0.5 inch H₂O</td>
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<tr>
<td></td>
<td>33 - 65 l/m²/s @ 200Pa</td>
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<tr>
<td>Filtration Efficiency:</td>
<td>&gt; 99.97% nom. @ 0.3um @ 5.33 cm/s, at nom. dp 25mm H₂O</td>
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<tr>
<td>Burst Strength:</td>
<td>Min. 200psi</td>
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<tr>
<td>Tensile Strength:</td>
<td>MD min 100 lbs per 2 inch, CD min 50 lbs per 2 inch</td>
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<td>Application:</td>
<td>Pleated HEPA membrane filters, cleanable, washable filters.</td>
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<tr>
<td>Available format:</td>
<td>Customized slit roll widths</td>
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<tr>
<td>Maximum Width:</td>
<td>79 inch (2.00m)</td>
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All above data is nominal and provided for information only and is subject to change. All metric conversions are approximate.
Oneida Air Systems
HEPA Grade Expanded PTFE Membrane Cartridge Filter

Description: 100% Spunbond Polyester with GE Preveil® HEPA Grade (H12) Expanded PTFE Membrane

Weight: 5 oz/yd² (170 g/m²)

Air Permeability: 5 - 10 ft³/min/ft² (cfm) @ .5” H₂O -ASTM D 737 (U.S.)
24 - 48 l/dm²/min @ 200 Pa -DIN 53887 (Germany)
2.5 - 5 cm³/cm²/s @ 125 Pa -JIS L 1096-A (Japan)

Thickness: Nom .015” (0.38 mm)

Minimum Mullen Burst Strength: 200 psi (14 kg/cm²)

Thermal Stability: Max 2% @ 275°F (135°C) for 2 hrs

Minimum Tensile Strength: 100 lbf/2” (45 kg/5 cm) Warp Direction ASTM D461
50 lbf/2” (23 kg/5 cm) Fill Direction

Maximum Operating Temperature: 275°F (135°C)

Fractional Efficiency vs. Particle Diameter

% Fractional Efficiency

Particle Diameter (μm)
WASHING PROCEDURES FOR FILTER CARTRIDGES UTILIZING EPTFE MEMBRANE

Non-Water Soluble Dusts - A hand-held compressed air nozzle should be used to backflush (with 30-60 psi air) by running the nozzle up and down the exterior of the filter cartridges. If a residue on the inside (ePTFE membrane side) of the filter cartridge remains, low velocity compressed air may be used directly on the inside, but care must be taken not to damage the membrane.

If there is significant backside blinding, compressed air may be used. However, forcing the dust further into the media from the backside is likely. Another option would be to remove and rotate the filter cartridge while submerging it in a solvent which will dissolve the dust. Check for filter cartridge compatibility.

Washing the filter cartridge with a high pressure water jet or stream is not recommended. Washing in place must be done only after air cleaning and with no greater than 40 psi water, unassisted by a nozzle or jet acceleration. A water force similar to a soft garden spray attachment is appropriate.

Water Soluble Dusts A hand-held compressed air nozzle should be used to backflush (with 30-60 psi air) by running the nozzle up and down the exterior of the filter cartridges. If a residue on the inside (membrane side) of the filter cartridge remains, low velocity compressed air may be used directly on the inside, but care must be taken not to damage the membrane.

If there is backside blinding, removal and rotation of the filter cartridge in a water bath is recommended. Over a short period of time, if water soluble, the dust will dissolve. The filter cartridge should be dried in a place of low moisture while applying low, dry heat, if possible. Do not exceed operational temperature.

Washing with a high pressure water jet or stream is not recommended. Washing in place must be done with no greater than 40 psi water, unassisted by any nozzle or jet acceleration. A water force similar to a garden spray attachment is appropriate.

GASKET REPAIR/REPLACEMENT (CARTRIDGES)

Gaskets may become loose over time and should be repaired or replaced as follows:

1. Remove the gasket completely. Excess adhesive should be removed from the endcap.
2. Roughen the surface of the endcap where the gasket attaches with an emery cloth.
3. Clean the gasket and endcap with isopropyl alcohol to remove residue.
4. Apply liquid silicone (GE RTV-118) to the endcap and attach the gasket.
5. Apply a small bead of silicone (GE IS808) to ID and OD of the gasket.
6. Allow the silicone adhesive to cure a minimum of 24 hours before using the filter.

Contact your XXXXXX representative if you have any questions regarding the cleaning of your pleated filter cartridges.