

**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/yd<sup>2</sup> (170 g/m<sup>2</sup>)

**Air Permeability:** 5 - 10 ft<sup>3</sup>/min/ft<sup>2</sup> (cfm) @ .5" H<sub>2</sub>O -ASTM D 737 (U.S.)  
 24 - 48 l/dm<sup>2</sup>/min @ 200 Pa -DIN 53887 (Germany)  
 2.5 - 5 cm<sup>3</sup>/cm<sup>2</sup>/s @ 125 Pa -JIS L 1096-A (Japan)

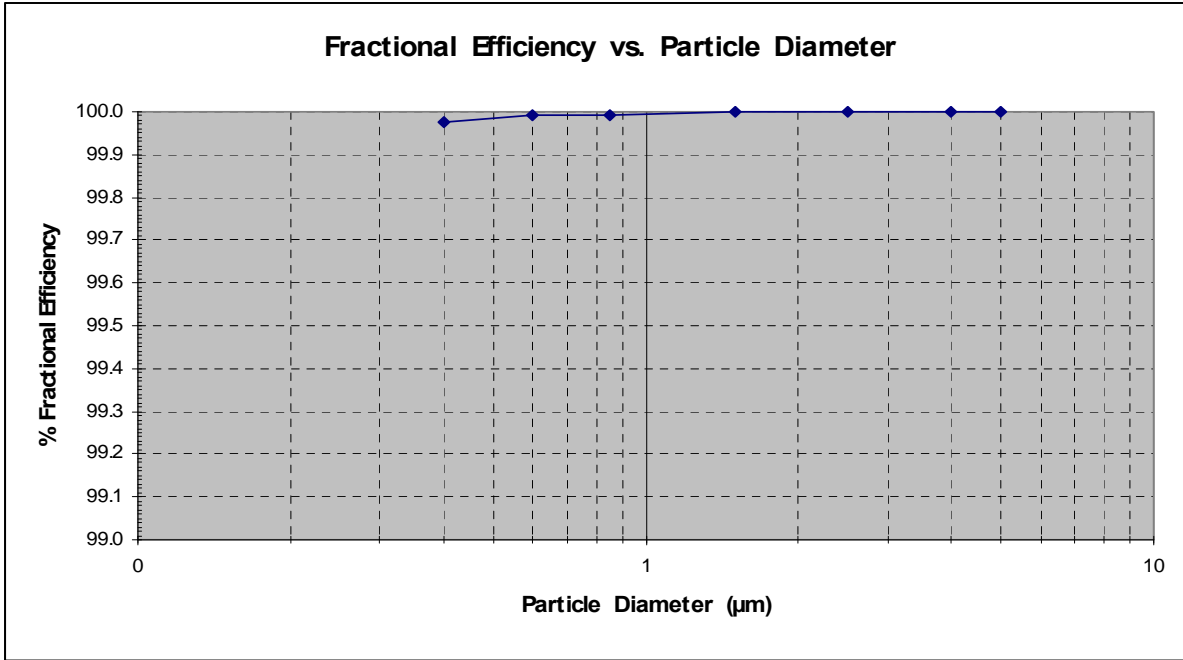
**Thickness:** Nom .015" (0.38 mm)

**Minimum Mullen Burst Strength:** 200 psi (14 kg/cm<sup>2</sup>)

**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)



## 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 XXXXX representative if you have any questions regarding the cleaning of your pleated filter cartridges.

Media ID : Oneida GE HEPA  
 Test Type : Fractional Efficiency  
 Test Aerosol : KCl, Neutralized

Velocity (fpm)	10.5
$\Delta p$ (" H <sub>2</sub> O)	0.794
Size Range ( $\mu\text{m}$ )	Fractional Efficiency (%)
0.3-0.5	99.977
0.5-0.7	99.992
0.7-1.0	99.993
1.0-2.0	99.999
2.0-3.0	100.000
3.0-5.0	100.000
>5.0	100.000

$$F_{eff} = \frac{C_{up} - C_{down}}{C_{down}} \times 100\%$$

$F_{eff}$  = Fractional Efficiency

$C_{up}$  = Particle Concentration Upstream of Filter

$C_{down}$  = Particle Concentration Downstream of Filter

Fractional Efficiency versus Particle Diameter

