

# **Hydrophobic ePTFE Membrane**

Hydrophobic ePTFE membrane is made from pure Polytetrafluoroethylene (PTFE), combined with long duration aqueous repellent capability and optimized porous structure. The hydrophobic nature of PTFE promises its long-lasting unwetted status even be kept contacting with water or other normal liquids, and the open porous structure provides a wide range of pore size, 0.02µm to 10µm, ensuring the retention of bacteria, virus, and particles is always effective while maintaining the excellent gas permeability.

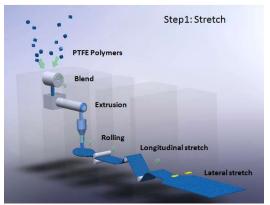


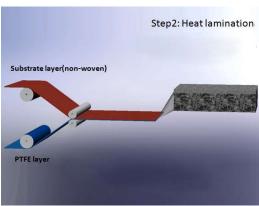
The combination of water resistance, air permeability, and particle retention introduces ePTFE into various medical applications involving long-lasting liquid resistance and air venting / gas filtration, based on which ePTFE membrane is compatible with multiple sealing methods, ultrasonic, heat, radio frequency welding, mechanical, and inserting molding, offering our customers more possibilities of sealing solutions, given the quality is as marvelous as promised.

Laminated PTFE membranes are widely used as air vent function in medical devices(especially in drug delivery application). Considering the compatibility of materials during welding, could offer PTFE membrane laminated with Polyester, Polypropylene, Polyolefin non-woven substrates. For example, a PTFE membrane with polyester substrate is more suitable for welding with Acrylonitrile Butadiene Styrene(ABS), Polycarbonate, and Poly(methyl methacrylate). And for Polypropylene, High-density polyethylene, a PTFE membrane with Polyolefin substrate works better. For applications requiring extreme low chemical extractables, low metal ion leachables, long-lasting tolerance with high

#### Hydrophobic ePTFE Membrane-Hydrophobic ePTFE Membrane

temperatures, or better biocompatibility, PTFE without substrate/ lamination is more suitable. For example, gas and liquid sampling analysis in the NOISH regulations mostly uses unsupported PTFE because of its high purity and low contamination.





#### **PFOA Free**

can supply PFOA free membrane filter that do not contain Perfluorooctanoic acid (PFOA), its salts and PFOA-related substances, which comply with relative regulation requirements in European REACH EU2017/1000, EC1907/2006 (REACH), and POP EU2020/784.

Certified Biological Safety (ISO 10993/USP Class VI)
Excellent Air Permeability, Outstanding Air Flow Rates
Optimized Backing Material,Better Sealing Capability
Wide Range of Pore Size (0.02-10µm)
High Water Entry Pressure (WEP)
HEPA/ULPA/STERILE Grade
Compatible with Different Sealing Methods
Ultrasonic, Heat, RF Welding, Mechanical, Inserting Molding
Serilization Compatibility
Autoclave,Ethylene Oxide, E-Beam, Gamma Irradiation

## Available Pore Sizes (µm)

0.02 / 0.03 / 0.05 / 0.1 / 0.2 / 0.45 / 0.8 / 1.0 / 2.0 / 5.0 / 10.0

# **Typical Performance Characteristics (\*0.2μm)**

Filtration Efficiency ≥99.99999% Brevundimonas diminuta Air Flow Rates Gurley 17-49sec WEP(60s) >450 KPa

### Hydrophobic ePTFE Membrane-Hydrophobic ePTFE Membrane

Thickness 280-440µm (Supported)

### **Typical Applications**

- Air Vent / Ventilation

- IV Filter Vent

- Transducer Protector (TP)

- Bacterial Air Vent

- Sensor Protection Cover

- Package Vents

- Drip Chamber Spike Vent

- Dispensing Pin

- Urine Meters/Bags

- Ostomy Pouches

- Insufflation Filters

- Suction Canister

- Air Sampling

- Surgical Ultra Low Penetration Air Filter

- Drug-eluting Stents

# **Support Type**

Polyester, Polypropylene, Polyolefin, or unlaminated (without substrate/lamination)

### **Membrane Formats**

Roll, Sheet, Disc, Adhesive Backing, Customization11