

Ultra-Thin PVDF Structural Film

Catlog Number: FCSM-0093

• Description

High-purity PVDF film used as a structural insulation layer and chemical barrier in low-temperature fuel cell components and humidifiers.

• Basic Information

Material Composition: Pure PVDF

Thickness (μm): 25

Density (g/cm^3): 1.78

Surface Resistance ($\text{m}\Omega\cdot\text{cm}^2$): Insulator

Tensile Strength (MPa): 55

Thermal Conductivity ($\text{W}/\text{m}\cdot\text{K}$): 0.13

Operating Temp Max ($^{\circ}\text{C}$): 150

Flexural Strength (MPa): N/A

Corrosion Resistance ($\mu\text{A}/\text{cm}^2$): Excellent

Contact Angle ($^{\circ}$): 85

Gas Permeability ($\text{cm}^3/\text{cm}^2\cdot\text{s}$): $< 10^{-10}$

Coefficient of Thermal Expansion ($10^{-6}/\text{K}$): 120

Shore Hardness: 75 (Shore D)

Water Uptake (%): < 0.05

Mean Pore Size (μm): N/A

Compressive Strength (MPa): 100

Electrical Conductivity (S/cm): $< 10^{-15}$


Specific Surface Area (m^2/g): N/A

Young's Modulus (GPa): 2.5

Chemical Stability: Acid Stable

Coating Material: None

Surface Roughness (R_a): 0.1

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