

Fluorinated Anion Exchange Film (FAF-45)

Catlog Number: FCEM-0025

• Description

A fluorinated backbone AEM that combines the chemical durability of PFSA with the alkaline functionality of anion exchange materials.

• Basic Information

Polymer/Material Base: Fluorinated AEM

Ion Exchange Capacity (IEC): 1.2 - 1.5 meq/g

Ionic Conductivity (S/cm): 0.03 - 0.05 (at 80°C)

Thickness (µm): 45 - 50

Tensile Strength (MPa): 45 - 65

Elongation at Break (%): 120 - 180

Water Uptake (%): 15 - 25

Swelling Ratio (%): < 5

Max Operating Temp (°C): 85

Chemical Stability (Fenton's Test): High Oxidation

Density (g/cm³): 1.85

Ash Content (%): < 0.05

Volatile Content (%): < 1.0

EW (Equivalent Weight): 700 - 850

Glass Transition Temp (T_g): 145

Storage Humidity (%): 40 - 60

Storage Temp (°C): 10-25

Solubility in Polar Solvents: Insoluble

Ionic Resistance (Ω·cm²): 0.12

Dimensional Stability (%): < 4

Thermal Stability (TGA): > 270°C

Flammability Rating: V-0

Surface Roughness (Ra): < 0.3 µm

 For Research or Industrial Raw Materials, Not For Personal Medical Use!