

Reinforced AEM for Water Electrolysis (R-AEM-60)

Catlog Number: FCEM-0033

• Description

A specialty 60 μ m anion exchange membrane with high-strength reinforcement, optimized for large-scale alkaline water electrolyzer stacks.

• Basic Information

Polymer/Material Base: PEEK Reinforced AEM

Ion Exchange Capacity (IEC): 1.4 - 1.7 meq/g

Ionic Conductivity (S/cm): 0.05 - 0.09 (at 70°C)

Thickness (μ m): 60 - 65

Tensile Strength (MPa): 70 - 90

Elongation at Break (%): 25 - 45

Water Uptake (%): 20 - 35

Swelling Ratio (%): < 5

Max Operating Temp (°C): 80

Chemical Stability (Fenton's Test): pH 0-14 Stable

Density (g/cm³): 1.35

Ash Content (%): < 0.15

Volatile Content (%): < 2.0

EW (Equivalent Weight): 650 - 750

Glass Transition Temp (T_g): 140

Storage Humidity (%): 30 - 60

Storage Temp (°C): 10-25

Solubility in Polar Solvents: Insoluble

Ionic Resistance (Ω -cm²): 0.1

Dimensional Stability (%): < 3

Thermal Stability (TGA): > 240°C

Flammability Rating: V-0

Surface Roughness (Ra): < 1.0 μ m

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