

Barium Ferrite Composite (BFO-GDC)

Catlog Number: FCEM-0076

• Description

A specialized composite electrolyte material used in symmetrical SOFC designs to minimize thermal expansion mismatch and interface resistance.

• Basic Information

Polymer/Material Base: BaFe12O19 + GDC

Ion Exchange Capacity (IEC): N/A

Ionic Conductivity (S/cm): 0.02 - 0.05 (at 800°C)

Thickness (µm): 15 - 30 (Layer)

Tensile Strength (MPa): 150 - 210

Elongation at Break (%): < 0.1

Max Operating Temp (°C): 900

Chemical Stability (Fenton's Test): Redox Stable

Density (g/cm³): 6.4

Ash Content (%): < 0.03

EW (Equivalent Weight): N/A

Glass Transition Temp (T_g): N/A

Storage Humidity (%): 0 - 95

Storage Temp (°C): Any

Solubility in Polar Solvents: Insoluble

Ionic Resistance (Ω·cm²): 0.22

Dimensional Stability (%): < 1

Thermal Stability (TGA): > 1350°C

Flammability Rating: Non-flammable

Surface Roughness (Ra): < 0.8 µm

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