Eata Battery

Aluminized Stainless Steel Flow Field

Catlog Number: FCSM-0032

Description

Stainless steel mesh with an aluminum surface enrichment layer, designed for high-temperature carbonate fuel cells to provide molten salt corrosion resistance.

Basic Information

Material Composition: SS310 / Aluminum Layer

Thickness (μm): 500

Density (g/cm³): 7.9

Surface Resistance (mΩ·cm²): < 20

Tensile Strength (MPa): 480

Thermal Conductivity (W/m·K): 14

Porosity (%): 55

Operating Temp Max (°C): 650

Flexural Strength (MPa): N/A

Corrosion Resistance (μA/cm²): Excellent (Molten)

Contact Angle (°): 65

Gas Permeability (cm³/cm²·s): 300

Coefficient of Thermal Expansion (10^{-6}/K): 17.5

Shore Hardness: 180 (HB)

Mean Pore Size (μm): 120

Compressive Strength (MPa): 250

Electrical Conductivity (S/cm): $1.2x10^4$

Specific Surface Area (m²/g): N/A

Young's Modulus (GPa): 190

Chemical Stability: Alkali Resistant

Coating Material: Aluminized Layer

Surface Roughness (Ra): 1.5

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

Eata Battery delivers the world's battery makers a single, reliable source for every high-performance raw material—cathode to collector, catalyst to membrane—so you can design, scale and ship next-generation batteries faster.

Tel: 1-631-637-0420 | 1-631-533-0595
Email: info@eataray.com
Suite 103, 17 Ramsey Road, Shirley, NY 11967, USA