

Titanium Liquid Diffusion Layer (LDL)

Catlog Number: FCSM-0037

• Description

A sintered titanium fiber felt specifically designed as a liquid diffusion layer for high-voltage water electrolyzers and regenerative fuel cells.

• Basic Information

Material Composition: Sintered Titanium Fiber

Thickness (μm): 400

Density (g/cm^3): 1.9

Surface Resistance ($\text{m}\Omega\cdot\text{cm}^2$): < 6

Tensile Strength (MPa): 90

Thermal Conductivity ($\text{W}/\text{m}\cdot\text{K}$): 20

Porosity (%): 60

Operating Temp Max ($^{\circ}\text{C}$): 450

Flexural Strength (MPa): N/A

Corrosion Resistance ($\mu\text{A}/\text{cm}^2$): < 0.3

Contact Angle ($^{\circ}$): 15

Gas Permeability ($\text{cm}^3/\text{cm}^2\cdot\text{s}$): 100

Coefficient of Thermal Expansion ($10^{-6}/\text{K}$): 8.6

Shore Hardness: N/A

Ash Content (%): < 0.01

Mean Pore Size (μm): 35

Compressive Strength (MPa): 18

Electrical Conductivity (S/cm): 4000

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

Young's Modulus (GPa): 115

Chemical Stability: Oxidation Resistant

Coating Material: Pt-Ir Optional

Surface Roughness (Ra): 1.8

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