

Niobium-Doped TiO₂ Support

Catlog Number: FCSM-0090

• Description

High-surface-area titanium dioxide support doped with niobium to improve electrical conductivity and durability for fuel cell catalyst layers.

• Basic Information

Material Composition: Nb-Doped TiO₂

Thickness (μm): N/A

Density (g/cm³): 4.25

Surface Resistance (mΩ·cm²): < 50

Tensile Strength (MPa): N/A

Thermal Conductivity (W/m·K): 1.5

Porosity (%): N/A

Operating Temp Max (°C): 600

Flexural Strength (MPa): N/A

Corrosion Resistance (μA/cm²): Best in Class

Contact Angle (°): 45

Gas Permeability (cm³/cm²·s): N/A

Coefficient of Thermal Expansion (10⁻⁶/K): 7.2

Shore Hardness: N/A

Water Uptake (%): 1.5

Ash Content (%): 100

Mean Pore Size (μm): 0.02

Compressive Strength (MPa): N/A

Electrical Conductivity (S/cm): 50

Specific Surface Area (m²/g): 85

Young's Modulus (GPa): N/A

Chemical Stability: Acid Stable

Coating Material: None

Surface Roughness (Ra): N/A

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