

Carbon Fiber Reinforced PPSU-FR

Catlog Number: CRSM-0054

• Description

Flame-retardant sulfone composite reinforced with carbon fiber for sterilization-resistant medical tools and aerospace interiors.

• Basic Information

Base Material: Polyphenylsulfone

Reinforcement Type: Carbon Fiber

Reinforcement Volume (%): 0.2

Density (g/cm³): 1.39

Tensile Strength (MPa): 105

Tensile Modulus (MPa): 7800

Elongation at Break (%): 2

Flexural Strength (MPa): 155

Flexural Modulus (MPa): 7200

Heat Deflection Temp (0.45MPa): 212

Glass Transition Temp (Tg): 220

Melting Point (°C): -

Thermal Conductivity (W/mK): 0.4

Flame Retardancy (UL94): V-0

Surface Resistivity (Ω): 10⁶

Water Absorption (%): 0.32

Printing Temp (°C): 365-400

Bed Temp (°C): 145-165

Chamber Temp (°C): 120-150

Nozzle Type: Hardened Steel

Layer Height (mm): 0.15

Shrinkage Rate (%): 0.3

Continuous Use Temp (°C): 195

Impact Strength (kJ/m²): 9.5

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