



Magnetic Carbon Fiber PLA

Catlog Number: CRSM-0033

• Description

Specialized magnetic-responsive composite for electromagnetic research, sensor housing, and inductive component prototyping.

• Basic Information

Base Material: Polylactic Acid

Reinforcement Type: CF + Ferrite Powder

Reinforcement Volume (%): 0.2

Density (g/cm³): 1.85

Tensile Strength (MPa): 45

Tensile Modulus (MPa): 5500

Elongation at Break (%): 1.5

Flexural Strength (MPa): 82

Flexural Modulus (MPa): 5100

Heat Deflection Temp (0.45MPa): 60

Glass Transition Temp (Tg): 58

Melting Point (°C): 165

Thermal Conductivity (W/mK): 0.55

Flame Retardancy (UL94): HB

Surface Resistivity (Ω): 10⁴

Water Absorption (%): 0.12

Printing Temp (°C): 210-230

Bed Temp (°C): 50-60

Chamber Temp (°C): -

Fan Speed (%): 100

Nozzle Type: Hardened Steel

Layer Height (mm): 0.2

Shrinkage Rate (%): 0.1

Continuous Use Temp (°C): 50

Impact Strength (kJ/m²): 4

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