



## Nickel-Coated CF Nylon

Catlog Number: CRSM-0035

### • Description

Advanced EMI shielding composite featuring nickel-coated carbon fibers for superior electrical conductivity and signal attenuation.

### • Basic Information

Base Material: Polyamide 12

Reinforcement Type: Ni-CF Fibers

Reinforcement Volume (%): 0.15

Density (g/cm<sup>3</sup>): 1.28

Tensile Strength (MPa): 72

Tensile Modulus (MPa): 6200

Elongation at Break (%): 2.5

Flexural Strength (MPa): 105

Flexural Modulus (MPa): 5800

Heat Deflection Temp (0.45MPa): 155

Glass Transition Temp (Tg): 45

Melting Point (°C): 178

Thermal Conductivity (W/mK): 0.85

Flame Retardancy (UL94): V-2

Surface Resistivity (Ω): 10<sup>1</sup> - 10<sup>3</sup>

Water Absorption (%): 0.65

Printing Temp (°C): 260-290

Bed Temp (°C): 80-100

Chamber Temp (°C): 50-80

Fan Speed (%): 10


Nozzle Type: Hardened Steel

Layer Height (mm): 0.2

Shrinkage Rate (%): 0.4

Continuous Use Temp (°C): 120

Impact Strength (kJ/m<sup>2</sup>): 8

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