

Tungsten Reinforced Nylon (Radiation)

Catlog Number: CRSM-0030

• Description

Ultra-high density composite designed for non-lead radiation shielding; provides excellent attenuation of X-rays and Gamma rays in medical research.

• Basic Information

Base Material: Polyamide

Reinforcement Type: Tungsten Powder

Reinforcement Volume (%): 0.75

Density (g/cm³): 3.5

Tensile Strength (MPa): 35

Tensile Modulus (MPa): 2800

Elongation at Break (%): 4

Flexural Strength (MPa): 55

Flexural Modulus (MPa): 2400

Heat Deflection Temp (0.45MPa): 165

Glass Transition Temp (Tg): 65

Melting Point (°C): 220

Thermal Conductivity (W/mK): 1.15

Flame Retardancy (UL94): HB

Surface Resistivity (Ω): 10¹⁵

Water Absorption (%): 0.9

Printing Temp (°C): 260-290

Bed Temp (°C): 80-100

Chamber Temp (°C): 50-70

Fan Speed (%): 20

Nozzle Type: Hardened Steel

Layer Height (mm): 0.2

Shrinkage Rate (%): 0.3

Continuous Use Temp (°C): 140

Impact Strength (kJ/m²): 12

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