



3D printing solutions for high performance materials

CF-PA12 Technical Data Sheet(TDS)

MECHANICAL PROPERTIES			
Property, Condition	Method	Value	
		XY	Z
Young's Modulus, Dry	ISO 527, GB/T 1040	3860±230 MPa	2180±130 MPa
Tensile Strength, Dry	ISO 527, GB/T 1040	92±7 MPa	47±5 MPa
Breaking Elongation Rate, Dry	ISO 527, GB/T 1040	8.4±1.8 %	4.1±1.2 %
Bending Modulus, Dry	ISO 178, GB/T 9341	4230±210 MPa	1820±170 MPa
Bending Strength, Dry	ISO 178, GB/T 9341	125±7 MPa	61±5 MPa
Impact Strength, Dry	ISO 179, GB/T 1043	57.5±3.4 kJ/m ²	13.3±0.8 kJ/m ²
Impact Strength (Notched), Dry	ISO 179, GB/T 1043	22.8±1.8 kJ/m ²	N/A

THERMAL PROPERTIES		
Property	Method	Value
Melting Temperature	DSC, 10° C/min	225° C
Glass Transition Temperature	DSC, 10° C/min	70° C
Crystallization Temperature	DSC, 10° C/min	140° C
Vicat Softening Temperature	ISO 306, GB/T 1633	220° C
Heat Deflection Temperature	ISO 75 1.8MPa	170° C
	ISO 75 0.45MPa	194° C

OTHERS PROPERTIES		
Property	Method	Value
Density	ISO 1183	1.06g/cm ³
Melt Index	280° C, 2.16kg	14.4±2.0 g/10min
Saturated Water Absorption Rate	25° C, 55% RH	0.88%

Updated on February 28, 2025