



Innovating Tomorrow's Materials

Technical Data Sheet Rev 1.0

Technical Data sheet: Performance PLA – Carbon Fiber

Physical Properties	Standard	Unit	Nominal Value
Specific Gravity	D792	g/cc	1.24
Melt Flow Rate	D1238	g/10 min	7 – 9
Melt Temperature	D3418	°C	165 – 180
Glass Transition Temperature	D3418	°C	55 – 60

Mechanical Properties	Standard	Unit	Nominal Value
Tensile Strength, Break	ISO 527	MPa	48
Tensile Modulus	ISO 527	MPa	4950
Tensile Elongation, Break	ISO 527	%	2
Flexural Strength	ISO 178	MPa	89
Flexural Modulus	ISO 178	MPa	6320

Thermal Properties	Standard	Unit	Nominal Value
Heat Deflection Temperature at 0.45 MPa	ISO 75	°C	91

Electrical Properties	Standard	Unit	Nominal Value
Surface Resistance	ASTM D257	Ohm/sq	>10 ⁹

Print Settings	
Extruder Temperature / °C	225 – 260
Bed Temp / °C	< 70
Heated Chamber	Not required
Nozzle Specifications / mm	> 0.4
Bed Adhesion	Glue stick
Layer Height / mm	> 0.1
Drying Specifications	2 – 4 hours @ 60 °C