Technical Data Sheet: CreatBot PLA

Print parameters	
Project	**Data**
Pre-printing drying conditions	40-50℃, 6-8 H
Nozzle temperature	190-230℃
Nozzle Diameter	0.2 / 0.4 / 0.6 / 0.8 / 1.0 mm
Print bed surface treatment	3D Printing Spray / PVP Glue Stick / Specialized Adhesive
Print bed temperature	40-60℃
Chamber temperature	OFF
Cooling fan speed	ON
Print speed	< 300 mm/s

Physical Properties	Test method	Data
Density	ISO1183	1.24g/cm^3
Saturated water absorption rate	25℃, 55%RH	0.41%
Melt index	340℃, 2.16 kg	23.5g/10 min
Melting temperature	DSC, 10℃/ min	160℃
Vicat softening temperature	ISO 306,GB/T 1633	57℃
Determination of temperature	ISO 75 , 0.45MPa	57℃

Mechanical Properties	Test method	Data
Tensile strength XY	ISO 527, GB/T 1040	36 MPa
Tensile strength Z	ISO 527, GB/T 1040	32 MPa
Young's modulus XY	ISO 527, GB/T 1040	2600 MPa
Young's modulus Z	ISO 527, GB/T 1040	2100 MPa
Elongation at break XY	ISO 527, GB/T 1040	12.3%
Elongation at break Z	ISO 527, GB/T 1040	7.6%
Bending strength XY	ISO 178, GB/T 9341	77 MPa
Bending strength Z	ISO 178, GB/T 9341	60 MPa
Bending modulus XY	ISO 178, GB/T 9341	2800 MPa
Bending modulus Z	ISO 178, GB/T 9341	2400 MPa
Impact strength XY	ISO 179, GB/T 1043	27.1 kJ/m²
Impact strength Z	ISO 179, GB/T 1043	14.1 kJ/m²

Disclaimer:

The above material performance data is from the CreatBot Laboratory and is intended solely for reference and comparison.
Actual 3D-printed model performance varies based on multiple factors, such as the printer, printing conditions, model geometry, and slicing software settings.
Users assume full responsibility for the legality and safety of their 3D printing when using CreatBot materials.
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