

EP012406WT001-TDS

COCOON PP-Birch(GF)

It is an enhanced PP material, solving problems of warping, layer adhesion and bed adhesion. It has the features of low warping, and strong layer adhesion. An easy-to-print PP maintains the typical PP benefits (high chemical resistance, recyclability possibilities, fracture resistance and semi-toughness). Also, it offers customizable color options. This material is ideal for 3D printing functional prototypes and mechanical parts for industry, automotive, mould components.

Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23°C	ISO 1183	g/cm ³	1.04
Melt Flow Rate	230°C, 2.16kg	ISO 1133	g/10min	13
Mechanical Properties				
Tensile Strength	50mm/min	ISO 527-1	MPa	60
Elongation @ Break	50mm/min	ISO 527-1	%	3
Flexural Strength	2mm/min	ISO 178	MPa	85
Flexural Modulus	2mm/min	ISO 178	MPa	3400
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	7

Note: The typical physical properties are not intended for use as sales specifications.

Part 2 Printed Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Mechanical Properties				
Tensile Strength(X-Y)	5mm/min	ISO 527-1	MPa	65
Tensile Strength(Z)	5mm/min	ISO 527-1	MPa	11
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	11
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	145

Note: All specimens are printed under the following conditions: nozzle temperature = 250°C, printing speed = 80 mm/s, the build plate is not heated, infill = 100%, nozzle diameter = 0.4mm.



Printing Path Direction of Specimen (Z)



Printing Path Direction of Specimen (X-Y)

Part 3 Printing Guidelines

Parameters	Settings
Nozzle Temperature	235-260°C
Build Plate Temp.	Not heated
Build Plate Material	Specialized build plate from JIANYU
Bottom Layer Printing Temp.	250°C
Enclosed-chamber Printing	Support open printing / Enclosed printing provides better results
Print Speed	60-100mm/s
Drying recommendations	80 °C in a hot air dryer for 4hours

Disclaimer:

The values provided in this data sheet are for reference and comparison purposes only. They should not be used for design specifications or quality control. Actual values may vary depending on printing conditions. The ultimate performance of printed parts depends not only on the material but also on the part design, environmental conditions, and printing conditions. The product specifications are subject to change without notice.

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