

# EP015606WT001-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 good surface. 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	GB/T 1033	g/cm <sup>3</sup>	1.13
Melt Flow Rate	230°C, 2.16kg	GB/T 3682	g/10min	15
Mechanical Properties				
Tensile Strength	50mm/min	GB/T 1040.2	MPa	28
Elongation @ Break	50mm/min	GB/T 1040.2	%	8
Flexural Strength	2mm/min	GB/T 9341	MPa	45
Flexural Modulus	2mm/min	GB/T 9341	MPa	2300
Izod Impact Strength	2.75J	GB/T 1843	kJ/m <sup>2</sup>	3
Thermal Property				
HDT	0.45MPa	GB/T 1634	°C	135

*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)	50mm/min	GB/T 1040.2	MPa	27
Tensile Strength(Z)	50mm/min	GB/T 1040.2	MPa	11
Impact Strength, Notched	2.75J	GB/T 1843	kJ/m <sup>2</sup>	5

*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.	n.a.
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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