

EP082206NC001-TDS

COCOON PETG-Birch(GF)

It is an enhanced PETG material with great fluidity and is easy to print and mold. Additionally, it exhibits low odor and excellent chemical resistance. The parts printed with this material are tough and durable, with good dimensional stability, presenting a matte and delicate frosted texture, which is suitable for printing structural parts or outdoor models with high anti-drop and impact resistance requirements.

Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23°C	ISO 1183	g/cm3	1.33
Melt Flow Rate	250°C, 5kg	ISO 1133	g/10min	10
Mechanical Properties				
Tensile Strength	5mm/min	ISO 527-1	MPa	65
Elongation @ Break	5mm/min	ISO 527-1	%	10
Flexural Strength	2mm/min	ISO 178	MPa	90
Flexural Modulus	2mm/min	ISO 178	MPa	2800
Impact Strength, Notched	1J	ISO 179-1	kJ/m2	8

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	ISO 527-1	MPa	61
Tensile Strength(Z)	50mm/min	ISO 527-1	MPa	19
Flexural Strength	2mm/min	ISO 178	MPa	84
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m2	6
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	75

Note: All specimens are printed under the following conditions: nozzle temperature = 250°C, printing speed = 100 mm/s, build plate temperature=65°C 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	250°C
Build Plate Temp.	60-70°C
Build Plate Material	Glass、PEI、Steel Spring Build Plate
Bottom Layer Printing Temp.	/
Enclosed-chamber Printing	/
Print Speed	60-150mm/s
Drying recommendations	60-70°C in a hot air dryer for 4-8hours

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.

Each user is responsible for determining the safety, legality, technical suitability, and disposal/recycling of the intended use. Unless otherwise stated, POLYFUL makes no warranties of any kind, express or implied, regarding the suitability of its materials for any use or application. POLYFUL shall not be liable for any damages, injuries, or losses caused by the use of POLYFUL materials in any application.