Version 1.1
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DP021001NC001-TDS

COCOON PLA-Basic

It is an entry-level printing material that is easy to print, mold, offers a rich selection of colors, and has broad adaptability. It is safe and non-toxic, making it the preferred material for 3D printing figurines, aesthetic creative designs, and prototype verifications.

Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23°C	GB/T 1033	g/cm3	1.24
Melt Flow Rate	190°C，2.16kg	GB/T 3682	g/10min	6
Mechanical Properties				
Tensile Strength	5mm/min	GB/T 1040.2	MPa	45
Elongation @ Break	5mm/min	GB/T 1040.2	%	3
Izod Impact Strength	2.75J	GB/T 1843	kJ/m2	4

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	GB/T 1040.2	MPa	50
Tensile Strength(Z)	5mm/min	GB/T 1040.2	MPa	25
Flexural Strength	2mm/min	GB/T 9341	MPa	85
Impact Strength, Notched	2.75J	GB/T 1843	kJ/m2	5

Note: All specimens are printed under the following conditions: nozzle temperature = 200°C, printing speed = 60 mm/s, build plate temperature=50°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	190-220°C
Build Plate Temp.	50-60°C
Build Plate Material	Glass、PEI、Steel Spring Build Plate
Bottom Layer Printing Temp.	200-210°C
Enclosed-chamber Printing	/
Print Speed	60-200mm/s
Drying recommendations	40-50 °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.
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