

DP024402NC001-TDS

COCOON PLA-Cactus(HT)

This product is an eco-friendly PLA material with high heat resistance. It significantly surpasses standard PLA in temperature endurance, long-term heat-resistant temperature of the printed parts can reach 70°C without needing annealing. This material boasts low warpage and shrinkage, ensuring high dimensional stability and superior bending properties. It is biodegradable under suitable conditions. The stable printing performance makes it easy to shape, and its distinctive matte texture makes it an excellent substitute for regular PLA. It is ideal for models, luminous signs/ characters, and other projects that demand environmental heat resilience.

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 ³	1.4
Melt Volume Rate	190°C,2.16kg	GB/T 3682	g/10min	12
Mechanical Properties				
Tensile Strength	5mm/min	GB/T 1040.2	MPa	45
Elongation @ Break	5mm/min	GB/T 1040.2	%	30
Flexural Strength	2mm/min	GB/T 9341	MPa	70
Flexural Modulus	2mm/min	GB/T 9341	MPa	2700
Izod Impact Strength	1J	GB/T 1843	kJ/m ²	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)	50mm/min	GB/T 1040.2	MPa	45
Tensile Strength(Z)	50mm/min	GB/T 1040.2	MPa	23
Flexural Strength	2mm/min	GB/T 9341	MPa	71
Impact Strength, Notched	2.75J	GB/T 1843	kJ/m ²	5

Note: All specimens are printed under the following conditions: nozzle temperature = 240°C, printing speed = 130 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	220-260°C
Build Plate Temp.	65°C
Build Plate Material	Glass、PEI、 Steel Spring Build Plate
Bottom Layer Printing Temp.	220-260°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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