

EP061001NC001-TDS

COCOON ABS-Vine

It is a high toughness ABS material, which can effectively resist external impacts, it has high heat distortion temperature, and good stability performance in high-temperature environments. The material has good fluidity and is easy for printing. The excellent mechanical and thermal properties of this material provide reliable support for the material to be widely used in the manufacturing of automotive parts, white goods, consumer electronics and toys for educational use.

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	1.05
Melt Flow Rate	230°C, 10kg	ISO 1133	g/10min	17
Mechanical Properties				
Tensile Strength	50mm/min	ISO 527-1	MPa	50
Elongation @ Break	50mm/min	ISO 527-1	%	60
Flexural Strength	2mm/min	ISO 178	MPa	85
Flexural Modulus	2mm/min	ISO 178	MPa	2650
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	25

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	48
Tensile Strength(Z)	50mm/min	ISO 527-1	MPa	21
Flexural Strength	2mm/min	ISO 178	MPa	67
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	32
Thermal Property				
Heat Deflection Temperature	1.8MPa	ISO 75-1	°C	90

Note: All specimens are printed under the following conditions: nozzle temperature = 250°C, printing speed = 100 mm/s, build plate temperature=90°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	230-260°C
Build Plate Temp.	80-100°C
Build Plate Material	Glass、PEI、 Steel Spring Build Plate
Bottom Layer Printing Temp.	/
Enclosed-chamber Printing	yes
Print Speed	60-150mm/s
Drying recommendations	60°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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