

EP061010NC002-TDS

COCOON ABS-Vine(HS)

It is an ABS material supporting high-speed and open printing. With high fluidity and low heat capacity, it can realize the rapid melting and cooling of the material, effectively maintaining the details of the effect of high-speed printing. Printing speed in high-speed printers can reach a maximum of 200mm/s. The heat-resistant temperature of the printed parts can reach 80~82°C, taking into account the printing efficiency, printing performance, heat-resistant performance and convenience of operation. At the same time, it has excellent mechanical properties and reliable dimensional stability. It is widely used in toys and blocks, electronic and electrical shell parts, industrial parts and fixtures.

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	1.11
Mechanical Properties				
Tensile Strength	5mm/min	ISO 527-1	MPa	40
Elongation @ Break	5mm/min	ISO 527-1	%	10
Flexural Strength	2mm/min	ISO 178	MPa	60
Flexural Modulus	2mm/min	ISO 178	MPa	2400
Impact Strength, Notched	1J	ISO 179-1	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	ISO 527-1	MPa	45
Tensile Strength(Z)	50mm/min	ISO 527-1	MPa	26
Flexural Strength	2mm/min	ISO 178	MPa	63
Flexural Modulus	2mm/min	ISO 178	MPa	2200
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m2	4
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	82

Note: All specimens are printed under the following conditions: nozzle temperature = 270°C, printing speed = 150 mm/s, build plate temperature=85°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	260-290°C
Build Plate Temp.	80-90°C
Build Plate Material	Glass、PEI、 Steel Spring Build Plate
Bottom Layer Printing Temp.	/
Enclosed-chamber Printing	Support open printing / Enclosed printing provides better results
Print Speed	100-200mm/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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