

EP071010NC001-TDS

COCOON ASA-Vine(HS)

It is a high-speed printing ASA material with a maximum printing speed of 300mm/s and supports open printing. It offers high fluidity, enabling easy printing while maintaining fine details and smooth surfaces even at high speeds. The printed components exhibit excellent impact resistance, weather resistance, anti-yellowing, aging resistance, as well as good anti-cracking and warping resistance. They are durable and suitable for end products with specific weather resistance requirements such as automotive interior parts, garden furniture, and outdoor leisure buildings.

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	1.06
Melt Volume Rate	220°C, 10kg	GB/T 3682	g/10min	35
Mechanical Properties				
Tensile Strength	5mm/min	GB/T 1040.2	MPa	40
Elongation @ Break	5mm/min	GB/T 1040.2	%	20
Flexural Strength	2mm/min	GB/T 9341	MPa	60
Flexural Modulus	2mm/min	GB/T 9341	MPa	2200
Izod Impact Strength	1J	GB/T 1843	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	GB/T 1040.2	MPa	40
Tensile Modulus(X-Y)	50mm/min	GB/T 1040.2	MPa	1900
Tensile Strength(Z)	50mm/min	GB/T 1040.2	MPa	23
Tensile Modulus(Z)	50mm/min	GB/T 1040.2	MPa	1700
Flexural Strength	2mm/min	GB/T 9341	MPa	52
Flexural Modulus	2mm/min	GB/T 9341	MPa	2000
Impact Strength, Notched	2.75J	GB/T 1843	kJ/m ²	30
Thermal Property				
HDT	0.45MPa	GB/T 1634	°C	90

Note: All specimens are printed under the following conditions: nozzle temperature = 270°C, printing speed = 200 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	270°C
Build Plate Temp.	90°C
Build Plate Material	Glass、PEI、 Steel Spring Build Plate
Bottom Layer Printing Temp.	270°C
Enclosed-chamber Printing	Support open printing / Enclosed printing

	provides better results
Print Speed	100-300mm/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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