

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	ISO 1183	g/cm ³	1.06
Mechanical Properties				
Tensile Strength	5mm/min	ISO 527-1	MPa	40
Elongation @ Break	5mm/min	ISO 527-1	%	20
Flexural Strength	2mm/min	ISO 178	MPa	60
Flexural Modulus	2mm/min	ISO 178	MPa	2200
Impact Strength, Notched	1J	ISO 179-1	kJ/m ²	25
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	83

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	40
Tensile Modulus(X-Y)	50mm/min	ISO 527-1	MPa	1900
Tensile Strength(Z)	50mm/min	ISO 527-1	MPa	23
Tensile Modulus(Z)	50mm/min	ISO 527-1	MPa	1700
Flexural Strength	2mm/min	ISO 178	MPa	52
Flexural Modulus	2mm/min	ISO 178	MPa	2000
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	30
Thermal Property				
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	88

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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