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DP024318NC002-TDS

COCOON PLA-Matte

COCOON PLA-Matte is a matte PLA filament made from high-quality, eco-friendly PLA. It is easy to print and provides high rigidity. Printed objects have a matte finish with a smooth, warm feel and hidden layer lines. Available in many colors, it offers a premium appearance without post-processing. Ideal for architectural models, home decor, artistic sculptures, and creative prototypes that require outstanding surface quality.

Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23C°	ISO 1183	g/cm3	1.35
Melt Volume Rate	190C°, 2.16kg	ISO 1133	g/10min	2.5
Mechanical Properties				
Tensile Strength	5mm/min	ISO 527-1	MPa	55
Elongation @ Break	5mm/min	ISO 527-1	%	3
Flexural Strength	2mm/min	ISO 178	MPa	75
Flexural Modulus	2mm/min	ISO 178	MPa	3500
Impact Strength, Notched	1J	ISO 179-1	kJ/m2	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	51
Tensile Modulus(X-Y)	50mm/min	ISO 527-1	MPa	3000
Tensile Strength(Z)	50mm/min	ISO 178	MPa	20
Tensile Modulus(Z)	50mm/min	ISO 178	MPa	2100
Flexural Strength	2mm/min	ISO 178	MPa	75
Flexural Modulus	2mm/min	ISO 178	MPa	2900
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m2	5

Note: All specimens are printed under the following conditions: nozzle temperature = 230C°, printing speed = 130 mm/s, build plate temperature=60C° infill = 100%, nozzle diameter = 0.4mm.

Printing Path Direction of Specimen (Z)

Printing Path Direction of Specimen (X-

Part 3 Printing Guidelines

Parameters	Settings
Nozzle Temperature	220-250C°
Build Plate Temp.	55-65C°
Build Plate Material	Glass、PEI
Bottom Layer Printing Temp.	230C°
Enclosed-chamber Printing	/
Print Speed	60-200mm/s
Drying recommendations	55 °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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