

EP011001NC001-TDS

COCOON PP-Especial

COCOON PP-Especial is a flexible 3D printing filament based on polypropylene (PP) with Shore A hardness of 85. It boasts exceptional processing capabilities, making it easier to extrude and print compared to other materials of the same hardness. The printed parts exhibit dimensionally stable, low warping and shrinkage, as well as strong interlayer adhesion. The printed parts are lightweight, low-density, high-toughness, high-elastic, and fatigue-resistant. They are also soft and skin-friendly, providing a comfortable touch. Additionally, it has excellent resistance to chemicals, weathering, high and low temperatures. It is suitable for 3D printing applications that require both toughness and strength, as well as texture and durability, such as medical fixation braces, industrial cushioning pads, and everyday protective covers.

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	0.9
Melt Flow Rate	230°C, 2.16kg	ISO 1133	g/10min	15
Shore A	23°C	-	-	85
Mechanical Properties				
Tensile Strength	500mm/min	ISO 37	MPa	10
Elongation @ Break	500mm/min	ISO 37	%	450
Stress at 100 % Elongation	500mm/min	ISO 37	MPa	5.5
Stress at 300 % Elongation	500mm/min	ISO 37	MPa	8
Tear Strength	500mm/min	ISO 34-1	kN/m	60

Note: The typical physical properties are not intended for use as sales specifications.

Part 2 Printing Guidelines

Parameters	Settings
Nozzle Temperature	235-260°C, recommended 250°C
Build Plate Temp.	Not heated
Build Plate Material	Specialized build plate from JIANYU
Bottom Layer Printing Temp.	250°C
Enclosed-chamber Printing	Support open printing / Enclosed printing provides better results
Print Speed	60-100mm/s
Drying recommendations	80 °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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