

EP101001NC001-TDS

COCOON TPU-Especial

COCOON TPU-Especial is a flexible 3D printing material with Shore A 75, combining the characteristics of TPU and rubber. This material boasts exceptional flowability. The printed parts exhibit a high resilience, low compression rate, and excellent fatigue resistance. Additionally, they are resistant to aging, UV rays, and corrosion, demonstrating flexibility and wear resistance. Given its high rebound requirement, TP-3375 is ideal for printing flexible industrial parts meant for impact absorption, such as liners, seals, and shock absorbers. Moreover, the printed objects possess a matte, sandblasted texture with a delicate and smooth touch, offering a skin-friendly experience. They also achieve strong adhesion with engineering materials like PC and ABS, making it suitable for wearable electronics, medical supports, footwear, and automotive interiors.

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
Melt Volume Rate	190°C,10kg	GB/T 3682	g/10min	25
Shore A	23°C	ISO 868	-	75
Mechanical Properties				
Tensile Strength	500mm/min	ISO 37	MPa	16
Elongation @ Break	500mm/min	ISO 37	%	640
Stress at 100 % Elongation	500mm/min	ISO 37	MPa	5
Stress at 300 % Elongation	500mm/min	ISO 37	MPa	7
Tear Strength	500mm/min	GB/T 529	kN/m	60
Compression Set	23°C, 22h	ISO 815	%	25

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

Part 3 Printing Guidelines

Parameters	Settings
Nozzle Temperature	230°C
Build Plate Temp.	40-50°C
Build Plate Material	Glass、PEI、Steel Spring Build Plate
Bottom Layer Printing Temp.	230°C
Enclosed-chamber Printing	/
Print Speed	20-30mm/s
Drying recommendations	70-80°C, 4-8h

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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