EP104201YE001-TDS

COCOON TPU-Matte

COCOON TPU-Matte is a thermoplastic polyurethane elastomer with a Shore hardness of 95A, combining the features of both plastics and rubber. It offers excellent printability and mechanical properties. The printed parts are impact-resistant, wear-resistant, flexible, and durable, exhibiting high resilience, tear resistance, fatigue resistance, and hydrolysis resistance. With a fine matte surface texture and a flexible, elastic feel, it is ideal for printing flexible industrial parts that require impact resistance, shock absorption, and high resilience, as well as for applications in wearable electronics, medical supports, footwear, automotive interior components, and more.

Part 1 Injection-Molded Specimen Performance

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Physical Properties				
Density	23°C	ISO 1183	g/cm3	1.22
Shore A	23°C	ISO 868	-	95
Mechanical Properties				
Tensile Strength	500mm/min	ISO 37	MPa	15
Elongation @ Break	500mm/min	ISO 37	%	400
Stress at 100 % Elongation	500mm/min	ISO 37	MPa	8.6
Stress at 300 % Elongation	500mm/min	ISO 37	MPa	10.8
Tear Strength	500mm/min	ISO 34-1	kN/m	95

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

Part 2 Printing Guidelines

Parameters	Settings
Nozzle Temperature	220-250°C
Build Plate Temp.	35°C
Build Plate Material	Glass、PEI、Steel Spring Build Plate
Bottom Layer Printing Temp.	230°C
Enclosed-chamber Printing	yes
Print Speed	50mm/s
Drying recommendations	70-80°C, 4-8h