



OVERTURE TPU TECHNICAL DATA SHEET

OVERTURE MATTE TPU is a TPU filament with matte surface and smooth printing performance at high speed.

Physical Properties

Property	Testing method	Typical value
Density	ISO 1183, GB/T 1033	1.170 (g/cm ³)
Melt index	200 °C, 2.16 kg Tested with 3D printed specimen of 100% infill	25.36 (g/10 min)

Mechanical Properties

Property	Testing method	Typical value
100% modulus (X-Y)	ISO 527, GB/T 1040	11.3 ± 0.2 (MPa)
Tensile strength (X-Y)	ISO 527, GB/T 1040	19.5 ± 0.3 (MPa)
Elongation at break (X-Y)	ISO 37, GB/T 528	510 ± 20 (%)
Shore hardness	ISO 7619, GB/T 531.1	95A

All testing specimens were printed under the following conditions:
nozzle temperature = 240 °C, printing speed = 45 mm/s, build plate temperature = 80 °C, infill = 100%
All specimens were conditioned at room temperature for 24h prior to testing

Recommended Printing Conditions

Nozzle temperature	210 - 240 (°C)
Drying temp. and time	70 / 6 (°C)/h
Build surface material	Textured PEI, Blue Tape
Build surface treatment	None, Applying PVA glue to the build surface
Build plate temperature	35 - 50 (°C)
Cooling fan	100%
Printing speed	< 250 mm/s

Based on 0.4 mm nozzle. Printing conditions may vary with different nozzle diameters.



Disclaimer

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End- use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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