

## PolyCore TPU-2000

Technical Data Sheet (Ver. 1.0, last updated: Feb., 2020)

PolyCore TPU-2000 is a TPU based pellets with a Shore hardness of ~95A.

### Physical Properties

Property	Testing Method	Typical Value
Density (g/cm <sup>3</sup> at 21.5 °C)	ASTM D792 (ISO 1183, GB/T 1033)	1.3
Melt index (g/10 min)	230 °C, 2.16 kg	5.6
Melting temperature (°C)	DSC, 10 °C/min	187
Crystallization temperature (°C)	DSC, 10 °C/min	149
Sheet Resistance in Dry State (10 <sup>5</sup> Ω/sq)	ASTM D991 (GB/T 2439, ISO 1853)	10
Sheet Resistance in Moisture State(10 <sup>5</sup> Ω/sq)	ASTM D991 (GB/T 2439, ISO 1853)	1.5 - 10

### Mechanical Properties<sup>1</sup>

Property	Testing Method	Typical Value
100% modulus (MPa) (X - Y)	ASTM D638 (ISO 527, GB/T 1040)	12.3 ± 0.3
Tensile strength (MPa) (X - Y)	ASTM D638 (ISO527, GB/T 1040)	36.9 ± 3.2
Elongation at break (%) (X - Y)	ASTM D638 (ISO527, GB/T 1040)	558.5 ± 57.8
Shore hardness	ASTM D2240 (ISO 7619, GB/T 31)	~95A

1. Tested with injection molding specimens

## Recommended Printing Conditions

Parameter	Recommended Setting
Drying temperature (°C)	70
Drying Time (h)	12
Maximum moisture content (%)	0.82
Barrel – zone 1 temperature (°C)	160 - 180
Barrel – zone 2 temperature (°C)	210 - 230
Barrel – zone 3 temperature (°C)	210 - 230
Nozzle temperature (°C)	205 - 215
Bed temperature (°C)	Room temperature - 70
Other Comments	
<ul style="list-style-type: none"><li>• PolyCore TPU-2000 is recommended to be stored under dry conditions</li></ul>	

## 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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