

Technical Data Sheet

PolyFlex™ TPU95

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V5.0



PolyFlex™
TPU95

PolyFlex™ TPU95 is a thermoplastic polyurethane (TPU) based filament specifically engineered to work on most desktop 3D printers. It has a shore hardness of 95A and can stretch more than 3 times its original length.

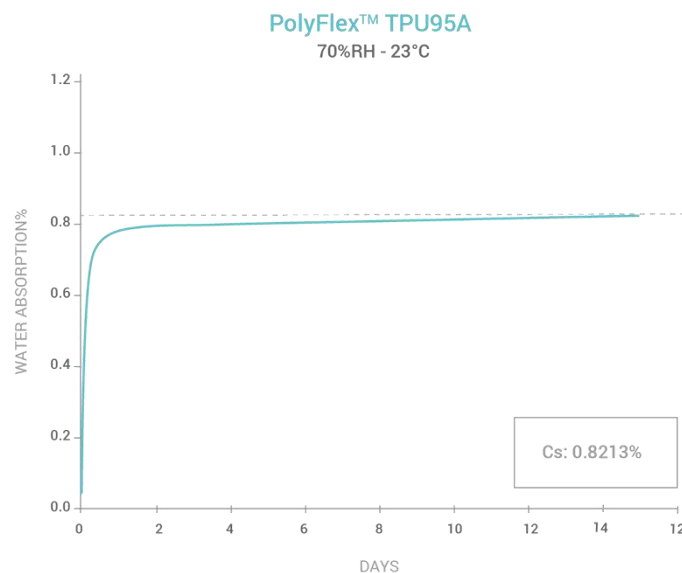
PHYSICAL PROPERTIES

Property	Testing Method	Typical Value
Density	ISO1183, GB/T1033	1.20-1.24 g/cm ³ at 21°C
Melt Index	210°C, 1.2 kg	3-6 g/10min
Light Transmission	N/A	N/A
Flame retardancy	UL94	V2

CHEMICAL RESISTANT DATA

Property	Testing Method
Effect of weak acids	Not Resistant
Effect of strong acids	Not Resistant
Effect of weak alkalis	Not Resistant
Effect of strong alkalis	Not Resistant
Effect of organic solvent	No data available
Effect of oils and grease	No data available
Effect of Sunlight	No data available

MOISTURE ABSORPTION CURVE



THERMAL PROPERTIES

Property	Testing Method	Typical Value
Melting temperature	DSC, 10°C/min	168 °C
Crystallization temperature	DSC, 10°C/min	94 °C

MECHANICAL PROPERTIES

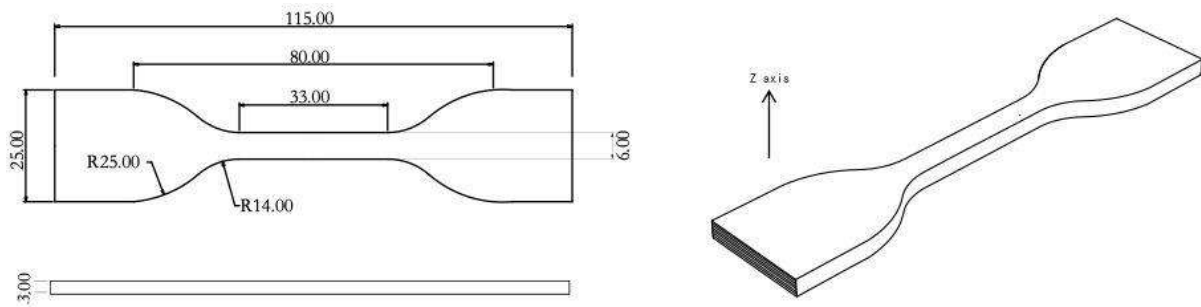
Property	Testing Method	Typical Value
100% modulus (X-Y)	ISO 527, GB/T 1040	9.4 ± 0.3 MPa
Young's modulus (X-Y)	ISO 527, GB/T 1040	29 ± 2.8 MPa
Elongation at break (X-Y)	ISO 527, GB/T 1040	330.1 ± 14%
Shore hardness	ISO 7619, GB/T 31	95A

HOW TO MAKE SPECIMENS

Printing temperature	225 °C
Bed temperature	45 °C
Shell	2
Top & bottom layer	4
Infill	100%
Environmental temperature	25 °C
Cooling fan	ON

TENSILE TESTING SPECIMEN

ASTM D638 (ISO 527, GB/T 1040)



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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