TPU A95

Property Data

Property	Test Method	Value
Density (g/cm^3)	ASTM D792	1.14
Hardness	ASTM D2240	95 Shore A / 48 Shore D
Melt Flow Rate (MVR)/ cm^3/10 min	ISO 1133 (200 °C)	20
Vicat softening point/ °C	ASTM D1525	115
Tensile Strength/ kpsi	ASTM D412	2.5
Tensile Modulus/ kpsi	ASTM D412	3.3
Tensile Elongation/ %	ASTM D412	550
Modulus at 100%/ kpsi	ASTM D412	1.1
Modulus at 300%/ kpsi	ASTM D412	1.7
Flex Modulus/ kpsi	ASTM D790	5.4

Recommended Printer Settings

Parameter	Value
Nozzle temperature	230 °C
Heated bed temperature	70 °C
Speed	40-100 mm/s
Infill	As needed, up to 100 %
Bed material	PEI, glass with glue stick; other standard bed materials may work as well
Drying	90 °C; keep filament in dry, sealed bag/container for storage

These processing conditions are general guidelines only. Each printer will likely have a unique set of printing parameters. TPU can be tricky to print when starting out, so try slower speeds, ideally with a direct/non-bowden extruder. TPU A95 has a very wide processing temperature range though. When comfortable, feel free to adjust the nozzle temperature to achieve faster speeds. We have had success on certain printers at 250 °C / 100 mm/s for example. We have also had success with some Bowden extruder printers such as the Ender 3 Pro and Prusa Mini.

Like most polymers, TPU A95 is moisture sensitive, take care to dry and maintain filament and store in a sealed container.