

**Process:** FFF - Fused Filament Fabrication

TPU-95 is a 95 Shore A semi-flexible filament used in the FFF 3D printing process. This material has an impact strength 84% greater than ABS, abrasion resistance 40% higher than ABS and 76% higher than PLA, and 580% Elongation capabilities. Applications for this material could include grips, guides, hinges, sleeves & snap-fit parts.

MECHANICAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Tensile Modulus	D 638	26 MPa	3800 psi
Tensile Stress at Yield	D 638	9 Mpa	1250 psi
Tensile Stress, Ultimate	D 638	39 Mpa	5650 psi
Elongation at Yield	D 638	55%	55%
Elongation at Break	D 638	580%	580%
Toughness	D 638	117.2 m·N/m <sup>3</sup> x10 <sup>6</sup>	17,000 in·lbF/in <sup>3</sup>
Izod Impact Strength	D 256	19.1 kJ/m <sup>2</sup>	9.1 ft lb/in <sup>2</sup>
Moisture Absorption (24 hours)	D 570	0.18%	
Hardness	Durometer	95 Shore A	
Colors		Request Availability	

THERMAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Glass Transition (Tg)	DSC	-24 deg. C	-11 deg. F
H.D.T. @ 0.07 Mpa (10.75 psi)	D 648	74 deg. C	165 deg. F
H.D.T. @ 0.45 Mpa (66 psi)	D648	49 deg. C	120 deg. F

Note: Materials specified are stocked materials, other materials may be available upon request. The information on the material properties are obtained from the material manufacture and SICAM expressly disclaims any product warranties and cannot guarantee the accuracy of the information presented.