TPU-85

Process: FFF - Fused Filament Fabrication

TPU-85 is a 85 Shore A flexible filament used in the FFF 3D printing process. Its low durometer makes it ideal for parts that need to bend and stretch while still being able to retain it's shape. Applications for this material could include Seals, gaskets, and plugs.

MECHANICAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Tensile Modulus	D 638	12 Mpa	1800 psi
Tensile Stress at Yield	D 638	4 Mpa	580 psi
Tensile Stress, Ultimate	D 638	26 Mpa	3700 psi
Elongation at Yield	D 638	65%	65%
Elongation at Break	D 638	660.0%	660.0%
Toughness	D 638	82.7 $m \cdot N/m^3 \times 10^6$	12,000 $in \cdot lbF/in^3$
Izod Impact Strength	D 256	4.2 kJ/m^2	2 $ft\ lb/in^2$
Moisture Absorption (24 hours)	D 570	0.22%	
Hardness	Durometer	85 Shore A	
Colors		Request Avalability	

THERMAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Glass Transition (Tg)	DSC	-35 deg. C	-31 deg. F
H.D.T. @ 0.07 Mpa (10.75 psi)	D 648	60 deg. C	140 deg. F
H.D.T. @ 0.45 Mpa (66 psi)	D648	44 deg. C	111 deg. F

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