



Thermoplastic Polyurethane (TPU-57 Shore D)

SPECIFICATIONS

Property	Spec	Value
Hardness	ISO 868	57 ±3 shore D
Modulus 100% (psi)	DIN 53 504	≥ 2900
Modulus 300% (psi)	DIN 53 504	≥ 4785
Tensile strength (psi)	DIN 53 504	≥ 6530
Elongation at break	DIN 53 504	≥ 350%
Tear Strength (lbf/inch)	DIN 53 515	≥ 630
Specific Gravity (g/cm³)	ISO 1183	1.16
Abrasion (mm³)	DIN 53 516	25
Compression set	ISO 815	≤ 30%

70 deg. C / 24h @ 25% deflection

Compression Set	ISO 815	≤ 35%
-----------------	---------	-------

100 deg. C / 24h @ 25% deflection

Min. Service Temperature		-31 deg. F
--------------------------	--	------------

Max. Service Temperature 240 deg. F

DESCRIPTION

MP96 is a TPU material with hardness 57 Shore D, specially compounded for high performance applications. The polyurethane polymer industry has enormous categories of products for a wide variety of applications. Polyurethane used in the seal industry is a thermoplastic elastomer (TPU). As the name suggests, it behaves like an elastomer but the chemistry is of a thermoplastic. The elasticity of a TPU is brought about through polymer morphology phase changes as in thermoplastics not through vulcanization as seen in other elastomers. Because of its thermoplastic nature, TPU has excellent tensile strength and abrasion resistance that other elastomers are unable to match. Meanwhile, TPUs also have good flexibility and shock absorbing performance. An additional advantage of TPUs is that they can be molded using conventional thermoplastic processes.