



Thermoplastic Polyurethane (TPU, C-HPU 72D)

SPECIFICATIONS

Property	Spec	Value
Hardness	ISO868	72D ±3
Density (g/cm ³)	ISO1183	1.21
Tensile Strength (N/mm ²)	DIN 53504	≥50
Ultimate Elongation	DIN 53504	≥150%
100% Modulus (N/mm ²)	DIN 53504	≥30
300% Modulus	DIN 53504	-
Minimum Service Temp.		-20° C (-4° F)
Maximum Service Temp. - Water		65° C (150° F)
Maximum Service Temp. - Water/Glycol		40° C (100° F)

DESCRIPTION

MP135 is a TPU material with hardness 72 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.