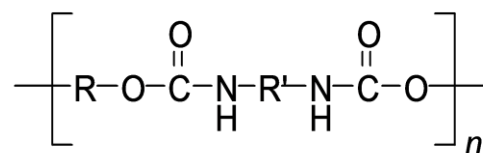


Thermoplastic Polyurethane (Cast PU)



SPECIFICATIONS

Property	Spec	Value
Hardness D	ISO 868	60 ± 3
Density (g/ cm ³)	ISO 1183	1.16
Tensile Strength (N/ mm ²)	ASTM D-412	38
Ultimate Elongation	ASTM D-412	480
100% Modulus (N/ mm ²)	ASTM D-412	19
300% Modulus (N/ mm ²)	ASTM D-412	25
Compression Set 100°C, 24hrs	ASTM D-395	35%
Compression Set 70°C, 22hrs	ASTM D-395B	29%
Minimum Service Temp	ASTM D-7028	-25°C -13°F
Maximum Service Temp		115°C 239°F

DESCRIPTION

MP184 is a H-PU, TPU material with hardness 60 ± 3 D. 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.