$$\begin{bmatrix}
 O & O & O \\
 R - O - C - N - R - N - C - O
\end{bmatrix}_{n}$$

## Thermoplastic Polyurethane (TPU, C-HPU 72D)

## **SPECIFICATIONS**

Property	Spec	Value
Hardness	IS0868	55D ±3
100% Modulus (N/mm²)	DIN 53504	20
300% Modulus	DIN 53504	35
Tensile Strength (N/mm²)	DIN 53504	45
Ultimate Elongation	DIN 53504	340%
Tear Strength (kN/m)	DIN ISO 34-1 METHOD B	110
Specific Gravity	ISO 1183	1210
Abrasion	DIN 53516	25
Compression Set: 24hr, 70C @ 25% def	ISO 815	30
Compression Set: 24h, 100C@ 25% def	ISO 815	35
Minimum Service Temp.		-20° C
Maximum Service Temp.		115C
Maximum Service Temp. Short		-
Color		Yellow

## DESCRIPTION

MP132 is a TPU material with hardness 55 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.