

# TPU 90A

Thermoplastic Polyurethane

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## Product Description:

Thermoplastic Polyester Polyurethane Elastomers with excellent mechanical properties, outstanding wear resistance, good tensile strength, good damping and resilience performance and superior low temperature flexibility.

## Typical Application:

Sport-shoe soles and accessories, Skiboot shells, technical mouldings, e.g. seals, castor tyres, tubing.

Physical	Test Method	Nominal Value (SI)
Density	ISO 1183/A	1.21 $\frac{g}{cm^3}$
Abrasion Loss	ISO 4649-A	30.0 mm <sup>2</sup>
<b>Mechanical</b>		
Tensile Stress		
20% Strain	DIN 53504	4.0 MPa
100% Strain	DIN 53504	7.0 MPa
300% Strain	DIN 53504	20.0 MPa
Yield (After storage in water for 21 days at 80°C)	DIN 53504	40.0 MPa
Yield	DIN 53504	55.0 MPa
Tensile Elongation (Break)	DIN 54504	550.0 %
Tear Strength	ISO 34-1	90 kN/m
Compression Set		
23°C, 72 hr	ISO 815	25%

70°C, 72 hr	ISO 815	40%
<b>Impact</b>		
Charpy Notched Impact Strength		
Shore A, 3 sec	ISO 179	91
Shore D, 3 sec	ISO 179	42