

**PU93** thermoplastic polyurethane  
 Mechanical, Physical and Thermal Properties

properties	condition	standard	unit		unit	
colour				green		green
hardness	23°C	ISO 868	Shore A	93 ± 2	Shore A	93 ± 2
hardness	23°C	ISO 868	Shore D	47 ± 3	Shore D	47 ± 3
modulus 100%	23°C	DIN 53 504	MPa	≥ 13	psi	≥ 1880
modulus 300 %	23°C	DIN 53 504	MPa	≥ 23	psi	≥ 3330
tensile strength	23°C	DIN 53 504	MPa	≥ 50	psi	≥ 7250
elongation at break	23°C	DIN 53 504	%	≥ 500	%	≥ 500
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 100	lbf/inch	≥ 570
spec. gravity	23°C	ISO 1183	kg/m <sup>3</sup>	1200	g/cm <sup>3</sup>	1,2
abrasion	23°C	DIN 53 516	mm <sup>3</sup>	35	mm <sup>3</sup>	35
compression set	*	ISO 815	%	≤ 25	%	≤ 25
compression set	**	ISO 815	%	≤ 33	%	≤ 33
minimum service temperature			°C	-30	°F	-22
maximum service temperature			°C	110	°F	230

\* 24h 70°C 25% def.

\*\* 24h 100°C 25% def.

**Chemical Properties**

Copolymer, based on aromatic isocyanate and diols

Resistant to oil

Not resistant to conc. acids, conc. lyes, conc. alcohols and aromatic solvents

Foodstuff approval: -