

H-PU 55 Shore D yellow

Thermoplastic polyurethane resistant against hydrolysis

This universally applicable material is often used to manufacture piston and rod seals. It's easy to machine, very flexible and has great high pressure resistance.

Mechanical, physical and thermal properties

Material code: 01009

Properties	Condition	Standard	Unit	Unit		
Color				yellow		
Hardness	23°C/3sec. 23°C/15sec.	ISO 868	Shore D	55 ± 3 51 ± 3		
Modulus 100%	23°C	DIN 53 504	MPa	≥20	psi	≥2900
Modulus 300%	23°C	DIN 53 504	MPa	≥35	psi	≥5075
Tensile strength	23°C	DIN 53 504	MPa	≥45	psi	≥6530
Elongation at break	23°C	DIN 53 504	%	≥340		
Tear strength	23°C	DIN ISO 34-1 Method B	kN/m	≥110	lbf/inch	≥630
Specific gravity	23°C	ISO 1183	kg/m ³	1210	g/cm ³	1,21
Abrasion	23°C	DIN 53 516	mm ³	25		
Compression set	*	ISO 815	%	≤30		
Compression set	**	ISO 815	%	≤35		
Minimum service temperature			°C	-20	°F	-4
Maximum service temperature			°C	115	°F	240

*24h 70°C 25% deflection

** 24h 100°C 25% deflection

Chemical Properties:

Copolymer, based on aromatic isocyanate and diols

Resistant to: oil, petrol, hot water, microbes

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