

P09 - HPU soft

thermoplastic polyurethane with resistance to hydrolysis

Mechanical, Physical and Thermal Properties

PROPERTIES	CONDITION	STANDARD	UNIT		UNIT	
Colour				yellow		yellow
hardness	23°C/3 sek.	ISO 868	Shore A	90 ± 2	Shore A	90 ± 2
hardness	23°C/15 sek.	ISO 868	Shore A	90 ± 2	Shore A	90 ± 2
hardness		ISO 868	Shore D		Shore D	
modulus 100%	23°C	DIN 53 504	MPa	≥ 11	psi	≥ 1595
modulus 300 %	23°C	DIN 53 504	MPa	≥ 28	psi	≥ 4060
tensile strength	23°C	DIN 53 504	MPa	≥ 50	psi	≥ 7250
elongation at break	23°C	DIN 53 504	%	≥ 380	%	≥ 380
tear strength	23°C	DIN ISO 34-1	kN/m		lbf/inch	
spec. gravity	23°C	ISO 1183	kg/m ³	1200	g/cm ³	1,2
abrasion		DIN 53 516	mm ³		mm ³	
compression set	*	ISO 815	%	≤ 27	%	≤ 27
compression set	**	ISO 815	%		%	
minimum service temperature			°C	-20	°F	-40
maximum service temperature			°C	110	°F	230

* 24h 70°C 25% def. ** 24h 100°C 25% def. *** 24h 150°C 25% def.

Chemical Properties

Copolymer, based on aromatic isocyanate and diols

Resistant to oil, hot water, hot air, ozone, synthetic and native esters

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