

HPU/U2 thermoplastic polyurethane with resistance to hydrolysis
Mechanical, Physical and Thermal Properties

Properties	Condition	Standard	Unit		Unit	
Colour				red		red
Hardness	23°C	ISO 868	Shore A	95 ± 2	Shore A	95 ± 2
Hardness	23°C	ISO 868	Shore D	48 ± 3	Shore D	48 ± 3
Modulus 100%	23°C	DIN 53 504	MPa	≥15	psi	≥2175
Modulus 300%	23°C	DIN 53 504	MPa	≥28	psi	≥4160
Tensile Strength	23°C	DIN 53 504	MPa	≥50	psi	≥7250
Elongation at Break	23°C	DIN 53 504	%	≥350	%	≥350
Tear Strength	23°C	DIN ISO34-1	kN/m	≥110	lbf/inch	≥570
Spec. gravity	23°C	ISO 1183	kg/m ³	1200	g/cm ³	1,2
Abrasion	23°C	DIN 53 516	mm ³	17	mm ³	17
Compression Set	*	ISO 815	%	≤27	%	≤27
Compression Set	**	ISO 815	%	≤33	%	≤33
Minimum Service Temperature			°C	-20	°F	-4
Maximum Service Temperature			°C	115	°F	240

* 24h 70°C 25% def.

** 24h 100°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 solvents

Foodstuff approval: German Regulations on Commodities Bedarfsgegenständeverordnung

1935/2004 EC

FDA Compound Available