

Polyurethane Properties

Physical properties	DIN - standard ASTM - standard	Unit	POLYURETHANE			
			PU	H-PU	FG-PU	LT-PU
Colour			Green	Red	White	Dark blue
Hardness	53505 2240	Shore A	94±2	95±2	92±2	92±2
Hardness	53505 2240	Shore D	48±3	50±3	45±3	45±3
Density	53479	g/cm ³	1.17	1.17	1.17	1.17
100% modulus	53504	N/mm ²	≥ 12	≥ 14	≥ 11	≥ 11.5
300% modulus	D412		30	33	27	28
Tensile strength	53504/53455 D412	N/mm ²	≥ 55	≥ 55	≥ 53	≥ 55
Elongation at break	53504/53455 D412	%	≥ 440	≥ 430	≥ 450	≥ 450
Modulus of elasticity tensile test	53457	N/mm ²				
Compression set 70°C/23h 25%Def	53517 D395	%	≤ 20	≤ 21	≤ 19	≤ 19
70°C/70h 25%Def	53517 D395	%				
100°C/22h	53517	%				
175°C/22h	53517	%				
Rebound resilience	53512 D2632	%	51	49	53	52
Tear strength	52512 D624	N/mm ²	≥ 115	≥ 125	≥ 96	≥ 105
Abrasion	53516	mm ³	15	15	15	15
min. service temp.		°C	-35	-35	-35	-55
max. service temp.		°C	+110	+110	+110	+110

Polyurethane Properties

Physical properties	DIN - standard ASTM - standard	Unit	POLYURETHANE			
			SL-PU	X-PU	XH-PU	XSL-PU
Colour			Dark grey	Dark green	Dark red	Dark grey
Hardness	53505 2240	Shore A	94±2			
Hardness	53505 2240	Shore D	48±3	60±3	60±3	60±3
Density	53479	g/cm ³	1.20	1.18	1.18	1.21
100% modulus	53504	N/mm ²	≥ 11.5	≥ 20	≥ 22	≥ 20
300% modulus	D412		29	38	39	38
Tensile strength	53504/53455 D412	N/mm ²	≥ 55	≥ 54	≥ 54	≥ 54
Elongation at break	53504/53455 D412	%	≥ 440	≥ 410	≥ 400	≥ 400
Modulus of elasticity tensile test	53457	N/mm ²				
Compression set 70°C/23h 25%Def	53517 D395	%	≤ 20	≤ 24	≤ 25	≤ 26
70°C/70h 25%Def	53517 D395	%				
100°C/22h	53517	%				
175°C/22h	53517	%				
Rebound resilience	53512 D2632	%	51	44	44	44
Tear strength	52512 D624	N/mm ²	≥ 112	≥ 151	≥ 165	≥ 158
Abrasion	53516	mm ³	15	16	16	16
min. service temp.		°C	-35	-35	-35	-35
max. service temp.		°C	+110	+110	+110	+110