

Overview Sylodyn®



Material

closed-cell PU elastomer (polyurethane) with highly elastic properties

Standard delivery dimension

Thickness: 12.5 mm / 25 mm
 Roll: 1.5 m wide, 5.0 m long
 Strip: up to 1.5 m wide, up to 5.0 m long

Other dimensions, punched and moulded parts on request.

Sylodyn® Material type



Material properties	Test methods	NB	NC	ND	NE	NF	HRB HS 3000	HRB HS 6000	HRB HS 12000
Colour		red	yellow	green	blue	violet	dark green	dark blue	dark brown
Static range of use ¹ in N/mm ²		0.075	0.15	0.35	0.75	1.50	3.00	6.00	12.00
Load peaks ¹ in N/mm ²		2.00	3.00	4.20	6.00	6.80	12.00	18.00	24.00
Mechanical loss factor	DIN 53513 ²	0.07	0.07	0.08	0.08	0.09	0.07	0.07	0.08
Rebound resilience in %	EN ISO 8307	70	70	70	70	70	70	70	70
Compression set ³ in %	EN ISO 1856 ²	<5	<5	<5	<5	<5	<5	<5	<5
Static modulus of elasticity ¹ in N/mm ²		0.75	1.13	3.01	6.69	11.99	33.20	74.00	181.00
Dynamic modulus of elasticity ¹ in N/mm ²	DIN 53513 ²	0.85	1.32	3.42	7.54	14.94	49.10	113.80	323.00
Static shear modulus in N/mm ²	DIN ISO 1827 ²	0.12	0.19	0.38	0.69	0.99	2.40	3.50	4.00
Dynamic shear modulus in N/mm ²	DIN ISO 1827 ²	0.17	0.26	0.55	1.02	1.48	2.80	4.20	5.30
Min. tensile stress at rupture in N/mm ²	EN ISO 527-3/5/500 ²	1.00	1.40	2.40	3.90	5.00	12.00	15.00	16.00
Min. tensile elongation at rupture in %	EN ISO 527-3/5/500 ²	300	300	300	300	300	400	400	400
Abrasion ³ in mm ³	DIN ISO 4649	≤900	≤300	≤500	≤300	≤200	≤100	≤80	≤70
Coefficient of friction (steel)	EN ISO 8295 ²	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.4
Coefficient of friction (concrete)	EN ISO 8295 ²	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
Coefficient of friction (wood)	EN ISO 8295 ²	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3
Specific volume resistance in Ω·cm	EN IEC 62631-3-1 ²	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰
Thermal conductivity in W/(mK)	EN 12667	0.07	0.08	0.11	0.13	0.15	0.16	0.17	0.19
Temperature range in °C		-30 to 70							
Temperature peak in °C	short term ⁴	120							
Flammability	EN ISO 11925-2	class E/EN 13501							

¹ Values apply to shape factor q=3

² Measurement/evaluation in accordance with the relevant standard

³ The measurement is performed on a density-dependent basis with differing test parameters

⁴ Application-specific

All information and data is based on our current knowledge. The data can be applied for calculations and as guidelines, are subject to typical manufacturing tolerances and are not guaranteed. Material properties as well as their tolerances can vary depending on type of application or use and are available from Getzner on request.

Further information can be found in VDI Guideline 2062 (Association of German Engineers) as well as in glossary. Further characteristic values on request.