

Overview Sylodyn®



Material

closed cellular PU elastomer (Polyurethane) with highly elastic properties

Standard delivery dimensions

Thicknesses: 0.5 in / 1.0 in

Rolls: 4.9 ft wide, 16.4 ft long

Strips: up to 4.9 ft wide, up to 16.4 ft 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
Color		red	yellow	green	blue	violet	dark green	dark blue	dark brown
Static range of use ¹ in psi		10.9	21.8	50.8	108.8	217.6	435.1	870.2	1740.5
Load peaks ¹ in psi		290	435	580	870	1160	1740	2611	3481
Mechanical loss factor	DIN 53513 ²	0.07	0.07	0.08	0.09	0.10	0.07	0.07	0.08
Rebound elasticity in %	EN ISO 8307	70	70	70	70	70	70	70	70
Compression set ³ in %	EN ISO 1856	<5	<5	<5	<5	<5	<5	<5	<5
Static modulus of elasticity ¹ in psi		108.8	159.5	369.8	950.0	1,771.4	4,815.3	10,732.8	26,251.8
Dynamic modulus of elasticity ¹ in psi	DIN 53513 ²	130.5	210.3	485.9	1,116.8	2,204.6	7121.4	16,505.3	46,847.2
Static shear modulus ¹ in psi	DIN ISO 1827 ²	18.9	30.5	50.8	88.5	116.0	348.1	507.6	580.2
Dynamic shear modulus ¹ in psi	DIN ISO 1827 ²	26.1	42.1	76.9	124.7	171.1	406.1	609.2	768.7
Min. tensile stress at rupture in psi	DIN EN ISO 527-3/5/100 ²	108.8	217.6	362.6	580.2	1,015.3	1,740.5	2,175.6	2,320.6
Min. tensile elongation at rupture in %	DIN EN ISO 527-3/5/100 ²	450	500	500	500	500	400	400	400
Abrasion ³ in in ³	DIN EN ISO 4649	0.0845	0.0336	0.0061	0.0049	0.0055	0.0061	0.0049	0.0043
Coefficient of friction (steel)	Getzner Werkstoffe	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.4
Coefficient of friction (concrete)	Getzner Werkstoffe	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.6
Specific volume resistance in Ω · inch	DIN IEC 60093	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹	> 4·10 ⁹
Thermal conductivity in W/mK	DIN EN 12667	0.060	0.075	0.090	0.100	0.110	0.160	0.170	0.190
Temperature range in °F		-22 to 158							
Temperature peak in °F	short term ⁴	248							
Flammability	EN ISO 11925-2	class E/EN 13501-1							

¹ Values applicable to form 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.

Material

closed cellular PU elastomer (Polyurethane) with highly elastic properties

Standard delivery dimensions

Thicknesses: 12.5 mm / 25 mm

Rolls: 1.5 m wide, 5.0 m long

Strips: 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
Color		red	yellow	green	blue	violet	dark green	dark blue	dark brown
Static range of use ¹ in N/mm ²		0.075	0.150	0.350	0.750	1.500	3.000	6.000	12.000
Load peaks ¹ in N/mm ²		2.00	3.00	4.00	6.00	8.00	12.00	18.00	24.00
Mechanical loss factor	DIN 53513 ²	0.07	0.07	0.08	0.09	0.10	0.07	0.07	0.08
Rebound elasticity in %	EN ISO 8307	70	70	70	70	70	70	70	70
Compression set ³ in %	EN ISO 1856	<5	<5	<5	<5	<5	<5	<5	<5
Static modulus of elasticity ¹ in N/mm ²		0.75	1.10	2.55	6.55	11.80	33.20	74.00	181.00
Dynamic modulus of elasticity ¹ in N/mm ²	DIN 53513 ²	0.90	1.45	3.35	7.70	15.20	49.10	113.80	323.00
Static shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.13	0.21	0.35	0.61	0.80	2.40	3.50	4.00
Dynamic shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.18	0.29	0.53	0.86	1.18	2.80	4.20	5.30
Min. tensile stress at rupture in N/mm ²	DIN EN ISO 527-3/5/100 ²	0.75	1.50	2.50	4.00	7.00	12.00	15.00	16.00
Min. tensile elongation at rupture in %	DIN EN ISO 527-3/5/100 ²	450	500	500	500	500	400	400	400
Abrasion ³ in mm ³	DIN EN ISO 4649	1,400	550	100	80	90	100	80	70
Coefficient of friction (steel)	Getzner Werkstoffe	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.4
Coefficient of friction (concrete)	Getzner Werkstoffe	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.7	≥0.6
Specific volume resistance in Ω·cm	DIN IEC 60093	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰
Thermal conductivity in W/mK	DIN EN 12667	0.060	0.075	0.090	0.100	0.110	0.160	0.170	0.190
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							

¹ Values applicable to form 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.

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