

Overview Sylomer®



Material

mixed celled PU elastomer (polyurethane) with combined spring and dampening properties

Standard delivery dimension

Thickness: 0.5 in/1.0 in
 Roll: 4.9 ft wide, 16.4 ft long
 Strip: up to 4.9 ft wide, up to 16.4 ft long

Other dimensions, punched and moulded parts on request.

Sylomer® Material type



Material properties	Test methods	SR 11	SR 18	SR 28	SR 42	SR 55	SR 110	SR 220	SR 450	SR 850	SR 1200
Color		yellow	orange	blue	pink	green	brown	red	grey	turquoise	winered
Static range of use ¹ in psi		1.6	2.6	4.1	6.1	8.0	16.0	31.9	65.3	123.3	174.0
Load peaks ¹ in psi		73	109	145	290	290	435	580	725	870	870
Mechanical loss factor	DIN 53513 ²	0.25	0.23	0.21	0.18	0.17	0.14	0.13	0.12	0.11	0.11
Rebound elasticity in %	EN ISO 8307	40	40	45	55	55	55	55	60	60	60
Compression ³ set in %	EN ISO 1856 ²	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Static modulus of elasticity ¹ in psi		8.7	11.6	27.6	31.9	49.3	120.3	213.2	487.3	1,048.6	1,359.0
Dynamic modulus of elasticity ¹ in psi	DIN 53513 ²	29.0	42.1	60.9	87.0	105.9	220.5	374.2	786.1	1,607.0	2,265.5
Static shear modulus ¹ in psi	DIN ISO 1827 ²	5.8	8.7	10.2	13.1	16.0	32.0	55.1	84.1	121.8	136.3
Dynamic shear modulus ¹ in psi	DIN ISO 1827 ²	14.5	17.4	20.3	24.7	29.0	49.3	82.7	119.0	166.8	185.6
Min. tensile stress at rupture in psi	DIN EN ISO 527-3/5/100 ²	43.5	50.8	58.0	72.5	87.0	116.0	174.0	261.1	362.6	391.6
Min. tensile elongation at rupture in %	DIN EN ISO 527-3/5/100 ²	300	300	250	250	250	220	200	170	170	160
Abrasion ³ in in ³	DIN EN ISO 4649	0.0854	0.0427	0.0793	0.0732	0.0671	0.0671	0.0610	0.0244	0.0183	0.0214
Coefficient of friction (steel)	Getzner Werkstoffe	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Coefficient of friction (concrete)	Getzner Werkstoffe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Specific volume resistance in $\Omega \cdot \text{in}$	DIN EN 62631-3-1 ²	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰
Thermal conductivity in W/mK	DIN EN 12667	0.045	0.050	0.050	0.055	0.060	0.075	0.090	0.110	0.130	0.140
Temperature range in °F		-20 to 160									
Temperature peak in °F	short term ⁴	250									
Flammability	EN ISO 11925-2	class E/EN 13501-1									

¹ Values apply to shape factor of 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.

Overview Sylomer®



Material

mixed celled PU elastomer (polyurethane) with combined spring and dampening 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.

Sylomer® Material type



Material properties	Test methods	SR 11	SR 18	SR 28	SR 42	SR 55	SR 110	SR 220	SR 450	SR 850	SR 1200
Color		yellow	orange	blue	pink	green	brown	red	grey	turquoise	winered
Static range of use ¹ in N/mm ²		0.011	0.018	0.028	0.042	0.055	0.110	0.220	0.450	0.850	1.200
Load peaks ¹ in N/mm ²		0.50	0.75	1.00	2.00	2.00	3.00	4.00	5.00	6.00	6.00
Mechanical loss factor	DIN 53513 ²	0.25	0.23	0.21	0.18	0.17	0.14	0.13	0.12	0.11	0.11
Rebound elasticity in %	EN ISO 8307	40	40	45	55	55	55	55	60	60	60
Compression ³ set in %	EN ISO 1856 ²	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Static modulus of elasticity ¹ in N/mm ²		0.06	0.08	0.19	0.22	0.34	0.83	1.47	3.36	7.23	9.37
Dynamic modulus of elasticity ¹ in N/mm ²	DIN 53513 ²	0.20	0.29	0.42	0.60	0.73	1.52	2.58	5.42	11.08	15.62
Static shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.04	0.06	0.07	0.09	0.11	0.22	0.38	0.58	0.84	0.94
Dynamic shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.10	0.12	0.14	0.17	0.20	0.34	0.57	0.82	1.15	1.28
Min. tensile stress at rupture in N/mm ²	DIN EN ISO 527-3/5/100 ²	0.30	0.35	0.40	0.50	0.60	0.80	1.20	1.80	2.50	2.70
Min. tensile elongation at rupture in %	DIN EN ISO 527-3/5/100 ²	300	300	250	250	250	220	200	170	170	160
Abrasion ³ in mm ³	DIN EN ISO 4649	1,400	400	1,300	1,200	1,100	1,100	1,000	400	300	350
Coefficient of friction (steel)	Getzner Werkstoffe	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Coefficient of friction (concrete)	Getzner Werkstoffe	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Specific volume resistance in Ω · cm	DIN EN 62631-3-1 ²	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰	>10 ¹⁰
Thermal conductivity in W/mK	DIN EN 12667	0.045	0.050	0.050	0.055	0.060	0.075	0.090	0.110	0.130	0.140
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 apply to shape factor of q = 3

² Measurement/evaluation in accordance with the relevant standard

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⁴ Application-specific

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