

Material

mixed-cell PU elastomer (polyurethane) with pronounced damping properties

Standard delivery dimension

Thickness: 12.5 mm / 25 mm

Roll: 1.5 m wide, 5.0 m long

Mat: 1.5 m wide, 1.0 m long

Strip: up to 1.5 m wide, up to 5.0 m long

Other dimensions, punched and moulded parts on request.

Sylodamp® SP 500 and Sylodamp® SP 1000 are only available in the maximum dimension of mats.

Sylodamp® Material type

SP 10

SP 30

SP 100

SP 300

SP 500

SP 1000

Material properties	Test methods	lemon yellow	pastel green	light green	traffic green	curry	turquoise green
Colour		lemon yellow	pastel green	light green	traffic green	curry	turquoise green
Static range of use ¹ in N/mm ²		0.005	0.012	0.050	0.150	0.250	0.500
Load peaks ¹ in N/mm ²		0.25	0.50	2.00	3.00	3.50	5.00
Mechanical loss factor	DIN 53513 ²	0.61	0.48	0.47	0.47	0.46	0.46
Rebound elasticity in %	EN ISO 8307	13	15	15	14	16	15
Specific energy absorption in mJ/mm ² (at 25 mm bearing thickness)	Getzner Werkstoffe	up to 1.8	up to 4.9	up to 12.0	up to 30.0	up to 50.0	up to 84.0
Resistance to strain in N/mm ² (at 10 % deformation)	EN ISO 844 ²	0.01	0.03	0.10	0.30	0.50	1.00
Compression ³ set in %	EN ISO 1856	< 5	< 5	< 5	< 5	< 5	< 5
Static shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.057	0.130	0.310	1.100	1.300	1.900
Dynamic shear modulus ¹ in N/mm ²	DIN ISO 1827 ²	0.24	0.53	0.89	2.30	3.80	5.00
Min. tensile stress at rupture in N/mm ²	DIN EN ISO 527-3/5/500 ²	0.30	0.45	0.9	1.8	2.7	3.2
Min. tensile elongation at rupture in %	DIN EN ISO 527-3/5/500 ²	160	160	160	160	160	160
Abrasion ³ in mm ³	DIN ISO 4649	≤ 4800	≤ 3100	≤ 2000	≤ 1700	≤ 1600	≤ 1300
Coefficient of friction (steel)	Getzner Werkstoffe	≥ 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
Specific volume resistance in Ω·cm	DIN IEC 60093	> 10 ¹²	> 10 ¹²	> 10 ¹²	> 10 ¹²	> 10 ¹²	> 10 ¹²
Thermal conductivity in W/mK	DIN EN 12667	0.039	0.043	0.061	0.082	0.100	0.110
Temperature range ⁴ in °C		- 30 to 70					
Temperature peak in °C	short term ⁵	120					
Flammability	EN ISO 11925-2	class E/EN 13501-1					

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 Increase in temperature due to energy conversion to be considered

⁵ 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.