

Properties	Method	Unit	Unfilled	typical values - FILLED (values at 23 °C)								
				25% glass	25% glass + 5% graph	25% carbon	35% carbon	60% bronze	40% bronze + 3% MoS2	30% glass spec.	50% s.steel	
Type of filler - % approx.												
Specific gravity	ASTM D792	-	2,17	2,23	2,18	2,10	2,10	3,88	3,15	2,25	3,30	
Tensile strength	ASTM D1457	MPa	30	16	15	15	15	14	17	17	18	
Elongation at break	ASTM D1457	%	300	260	200	180	80	100	100	300	280	
Compressive strength 1% deformation	ASTM D695	MPa	4,5	7,0	7,0	10,0	11,0	10,5	10,0	7,0	-	
Deformation under load 14N/mm2 for 24h - Total P (II)	ASTM D621	%	14,5	9,5	6,8	6,5	3,7	6,0	8,0	9,0	4,9	
Deformation under load 14N/mm2 for 24h - Total T (L)	ASTM D621	%	16,5	13,5	7,0	5,5	3,4	5,6	7,0	12,0	6,0	
Deformation under load 14N/mm2 for 24h - Permanent P (II)	ASTM D621	%	8,0	5,0	5,0	3,0	1,0	2,5	4,0	4,5	2,4	
Deformation under load 14N/mm2 for 24h - Permanent T (L)	ASTM D621	%	8,5	7,8	4,0	2,8	1,1	2,3	3,0	7,0	2,0	
Hardness (shore D - 15 sec)	ASTM D2240	-	55	63	60	63	65	65	66	65	64-72	
Friction coefficient dynamic	ASTM D3028 (0,8m/s, 1Mpa, s. steel Ra 0.5 µ)	-	0,05	0,07	0,06	0,06	0,06	0,06	0,13	0,07	-	
Wear factor (K)	-	mm³sec/Nmh	1	0,00071	0,00106	0,00082	0,00070	0,00041	-	0,0007	-	
PV limit at 0,05 m/sec	-	Nm/mm²sec	0,040	0,365	0,400	0,365	0,330	0,545	0,350	0,360	-	
PV limit at 0,50 m/sec	-	Nm/mm²sec	0,070	0,475	0,545	0,460	0,400	0,680	-	0,450	0,250	
PV limit at 5,00 m/sec	-	Nm/mm²sec	0,095	0,590	0,800	0,545	0,500	1,020	-	0,540	-	
Coefficient of linear thermal expansion from 25 to 100°C	ASTM E831	°C ⁻¹	16x10 ⁻⁵	10x10 ⁻⁵	11x10 ⁻⁵	9,5x10 ⁻⁵	9x10 ⁻⁵	9,5x10 ⁻⁵	9,8x10 ⁻⁵	8x10 ⁻⁵	9x10 ⁻⁵	
Thermal conductivity	ASTM D2214	W/mK	0,23	0,43	0,62	0,64	0,68	0,74	0,68	0,34	0,65	
Dielectric strength (short-time air thickness 0,5 mm)	ASTM D149	kV/mm	55	13	2,5	-	-	-	-	12	-	
Dielectric constant (50-109 Hz)	ASTM D150	-	2,1	2,5	3,3	-	-	-	-	2,5	-	
Dissipation factor	ASTM D150	-	<0,0002	0,003	0,0025	-	-	-	-	0,0012	-	
Volume resistivity	ASTM D257	Ohm/cm	10 ¹⁷	10 ¹⁶	10 ¹⁵	10 ³	10 ³	-	-	10 ¹⁶	-	
Surface resistivity (100% humid.)	ASTM D257	Ohm	10 ¹⁷	10 ¹⁶	10 ¹⁴	10 ³	10 ³	-	-	10 ¹⁵	-	