

Properties of moulded parts made from EPP												
Property		Test standard	Unit	Measured variable								
Moulded part density		ISO 845	kg/m ³	20	40	60	80	100	150	200	250	300
Tensile strength		DIN EN ISO 1798	kPa	300	600	880	1150	1410	1510	1700	2200	2700
Breaking elongation		DIN EN ISO 1798	%	40	33	27	23	20	12	8	7	6
Compressive stress at	10% Compression	i.A. an ISO 844		70	180	310	480	680	760	1200	1840	2640
	25% Compression		kPa	80	220	370	550	750	1000	1520	2320	3400
	50% Compression			150	330	550	810	1100	1520	2400	3800	5760
Compression set		DIN EN ISO 1856	%	30	28	<27	<27	<27	<27	<27	<27	<27
Compression stress value		DIN EN ISO 3386-1	kPa	50	200	400	-	-	-	-	-	-
Thermal stability		i.A. an DIN ISO 2796	%	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thermal conductivity		DIN EN 12667	W/(m·K)	0,036	0,038	0,04	0,043	0,046	≥0,046	≥0,046	≥0,046	≥0,046
Water absorption		i.A. an DIN 53 428	Vol.-%	<1	<1	<1	<1	<1	<1	<1	<1	<1
Surface resistance		DIN IEC 60 093	Ohm	≤10 ¹²								
Cushion factor C		ISO 4651	-	2,8	2,7	2,6	-	-	-	-	-	-
Special energy absorption		ISO 4651	kNm/m ³	90	320	700	-	-	-	-	-	-
Static surface load		DIN 53 421	kPa	12	23	92	-	-	-	-	-	-
Fire behaviour	at 10 mm	DIN4102-1		B3	B3	B3/B2	B2	B2	B2	B2	B2	B2
	at 20 mm	DIN4102-1		B3	B2							
	at 30 mm	DIN4102-1		B3/B2	B2							
	at 13 mm	FMVSS302		-	fulfilled							
	at 8,4 mm	UL 94		-	-	-	HBF	HBF	HBF	HBF	HBF	HBF
	at 13 mm	UL 94		-	-	HBF						