

Technical Information

Thermoplastic
Polyurethane
Elastomers (TPU)

Elastollan® –
Electrical
Properties

Elastogran is
Polyurethanes

Elastogran



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Elastollan – electrical Properties

Property	Unit	Standard	Elastollan							
			C 60 AW	C 78 A	C 80 A	C 85 A	C 90 A	C 95 A	C 59 D	C 60 D
Comparative tracking index CTI		IEC 60112	600	600	600	600	600	600	600	600
Electrical strength E_B1	kV/mm	IEC 60243-1 Elektrode configuration K 20, K 20 in transformer oil Thickness of specimen 1 mm	22	23	23	23	24	26	28	28
Surface resistivity σ_e	Ω	IEC 60093 Thickness of specimen 1 mm	10^{13}	10^{13}	10^{13}	10^{13}	10^{14}	10^{15}	10^{15}	10^{15}
Volume resistivity P_e	$\Omega \cdot \text{cm}$	IEC 60093 Thickness of specimen 1 mm	10^{10}	10^{11}	10^{11}	10^{11}	10^{11}	10^{11}	10^{12}	10^{13}
Relative permittivity ϵ_r 100 Hz 1 MHz		IEC 60250 Thickness of specimen 1 mm	7,0 6,5	7,0 6,0	7,0 6,0	7,0 6,0	7,0 5,5	7,0 5,0	6,5 5,0	6,0 5,0
Dissipation factor $\tan \delta$ 100 Hz 1 MHz		IEC 60250 Thickness of specimen 1 mm	0,20 0,05	0,05 0,07	0,05 0,07	0,05 0,07	0,05 0,07	0,05 0,07	0,04 0,06	0,04 0,06

*Pre-treatment of specimen:
20hrs/100 °C annealed; conditioned
14d in standard atmosphere
(23 °C/50% relative humidity) and
then measured.*

The table provides only representative values and not the suppliers specification values.

C 64 D	C 74 D	R 1000	R 2000	R 3000	1175 AW	1180 A	1185 A	1185 A FHF	1190 A	1154 D	1164 D	1174 D
600	600	600	600	600	600	600	600	600	600	600	600	600
31	31	35	35	35	25	35	35	26	35	36	36	37
10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁴	10 ¹⁵	10 ¹⁵	10 ¹⁴	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ¹⁵
10 ¹⁵	10 ¹⁵	10 ¹¹	10 ¹¹	10 ¹¹	10 ¹¹	10 ¹¹	10 ¹²	10 ¹¹	10 ¹²	10 ¹³	10 ¹⁴	10 ¹⁵
6,0 4,5	5,0 4,0	7,0 6,0	6,5 5,0	6,0 5,0	8,0 6,5	8,0 6,0	8,0 5,5	7,5 5,5	7,5 5,5	6,5 4,5	6,0 4,5	5,0 4,0
0,04 0,05	0,03 0,04	0,03 0,06	0,03 0,06	0,03 0,06	0,07 0,14	0,03 0,11	0,03 0,10	0,04 0,10	0,04 0,09	0,05 0,06	0,04 0,05	0,03 0,04

Elastogran is polyurethanes

With top quality products, a reputation for good customer service and continuous progress and development, Elastollan has secured a firm position in numerous markets.

We want to share our know-how and experience to contribute to your own success: The versatile Elastollan is the ideal material to fulfill your requirements.

For further information, the following detailed brochures are available upon request:

- Thermoplastic Polyurethane Elastomers: Elastollan
- Elastollan – Product Range
- Elastollan – Material Properties
- Elastollan – Processing Recommendations
- Elastollan – Chemical Resistance

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