Technical Data Sheet

PC transparent

Polycarbonat

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183	g / cm³	1,2
Water absorption	DIN EN ISO 62	%	0,15
Brechungsindex (20 °C)	ISO 489	---	1,586
Mechnical properties			
Refractive index (20 °C)	DIN EN ISO 527	MPa	60
Elongation at break	DIN EN ISO 527	%	6
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>2300
Bending modulus of elasticity	DIN EN ISO 178	MPa	>2300
Notched impact strength -30 °C	DIN EN ISO 179-1eA	kJ / m²	11
izod notched impact strength +23 °C	DIN EN ISO 180-1eA	kJ / m²	65
izod notched impact strength -30 °C	DIN EN ISO 180-1eA	kJ / m²	10
Thermal properties			
Thermal conductivity	DIN 8302	W / (m.K)	0,2
Linear coefficient of thermal expansion (20-70°C)	ISO 11359-2	K^{-1}	$65x10^{-6}$
Service temperature long term	Average	°C	---
Service temperature short term (max.)	Average	°C	---
Heat resistance	DIN EN ISO 75, Verf. A, HDT	°C	132
Heat resistance	DIN EN ISO 75, Verf. B, HDT	°C	142
Vicat softening temperature	DIN EN ISO 306, Vicat B 120	°C	149
Vicat softening temperature	DIN EN ISO 306, Vicat B 50	°C	148
Electrical properties			
Dielectric constant (50 Hz)	DIN EN 62631	---	3
Dielectric constant (1 MHz)	DIN EN 62631	---	2,9
Dielectric dissipation factor (50 Hz)	DIN EN 62631	---	0,001
Volume resistivity	DIN EN 62631	Ω * cm	$>10^{14}$
Surface resistivity	DIN EN 62631	Ω	10^{16}
Dielectric strength	IEC 60243	kV / mm	30
Dissipation factor (50 Hz)	DIN EN 62631		0,001
Dissipationfactor (1 MHz)	DIN EN 62631		0,01

The values given are average values which are backed up by continuous statistical tests. They serve merely as information about our products and are intended as an aid to material selection. They do not constitute a legally binding guarantee of specific properties or suitability for specific applications.

KTK Kunststofftechnik Vertriebs GmbH
Industriestr. 16 • 82110 Germering • Tel. +49(89) 8407970 • Fax +49(89) 84058896 • info@ktkgmbh.de • www.ktkgmbh.de
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