

Technical Data Sheet

PC Industrial Grade

PC (Industrial Grade) – polycarbonate, natural colour, transparent

Typical Properties

- Amorphous thermoplastic, glass transition temperature 150 °C
- Natural colour, virtually colourless and transparent
- Low moisture absorption
- High stiffness and hardness
- High heat deflection resistance
- Good formability and dimensional stability
- Electrically insulating
- Good impact strength, also at low temperatures

Typical Industries

- Electronics
- Mechanical engineering

	Test Method	Unit	Value
Mechanical Properties			
Yield stress	DIN EN ISO 527	MPa	65
Elongation at break	DIN EN ISO 527	%	80
Tensile modulus	DIN EN ISO 527	MPa	2300
Notched impact strength	DIN EN ISO 179	kJ / m ²	20
Shore hardness	DIN EN ISO 868	scale D	82
Thermal Properties			
Glass transition temperature	ISO 11357-3	°C	150
Thermal conductivity	DIN 52612-1	W / (m·K)	0.21
Specific heat capacity	DIN 52612	kJ / (kg·K)	1.20
Coefficient of linear expansion	DIN 53752	10 ⁻⁶ / K	70
Continuous service temperature	Guide value	°C	-40 ... 115
Short-term service temperature (max.)	Guide value	°C	140
Heat deflection temperature	DIN EN ISO 75	°C	135
General Properties			
Density	DIN EN ISO 1183-1	g / cm ³	1.20
Water absorption	DIN EN ISO 62	%	0.2

	Test Method	Unit	Value
Burning behaviour (thickness 3 mm / 6 mm)	UL 94		HB / HB
Electrical Properties			
Dielectric constant	IEC 60250		3
Dielectric dissipation factor (50 Hz)	IEC 60250		0.001
Volume resistivity	DIN EN 62631-3-1	$\Omega \cdot \text{cm}$	10^{15}
Surface resistivity	DIN EN 62631-3-2	Ω	10^{15}
Comparative tracking index (CTI)	IEC 60112		275
Dielectric strength	IEC 60243	kV / mm	30

The values stated are typical average values determined on standardised test specimens. They serve solely to inform about our products and to assist in material selection. We do not thereby provide a legally binding assurance of specific properties or of suitability for a particular purpose. As actual property values also depend on the dimensions of the semi-finished product and on processing conditions, they may deviate from the figures stated in individual cases.