Technical datasheet

PC (polycarbonate) abrasion resistant flame retardant

Example of application
› housing for the electrical industry; Insulating parts in the electrical industry › applications in aviation

Advantage	Disadvantages
› scratch resistance › flame retardant › good chemical resistance › good transparency (about 85%) › physiologically harmless › cold mouldable	› moisture ingress

Basic information	Specification
Format	**Sheets:** 1.5 up to 8 mm available in 3 m x 2 m and 2 m x 1,2 m

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.2	g/cm³	DIN EN ISO 1183
Moisture ingress	0.35	%	DIN EN ISO 63

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	60	N/mm²	DIN EN ISO 527
Elongation at break	110	%	DIN EN ISO 527
E-module	2300	N/mm²	DIN EN ISO 527
Notch toughness	n.sp.	kJ/m²	DIN 53453
Rockwellhardness	n.sp.	n.sp.	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.2	W/(m·K)	DIN 52612
Linear thermal expansion coefficient	0.7	$K^{-1} \cdot 10^{-4}$	DIN 53752
	1.4	mm	At inital length of 1.000 mm and a temperature difference of 20 °C
Min. operating temperature, short-term	135	°C	
Max. operating temperature, long-term	115	°C	
Fire classification	V0 (applies to material thickness 3-6 mm)	n.sp.	UL94V

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10^{16}	Ω·cm	DIN IEC 60093
Outer surface coefficient	n.sp.	Ω	ASTM D257
Puncture resistance	n.sp.	kV/mm	IEC 60243

Legend
n.sp. = not specified

*higher specification on request; the guide values / information refer to except for layer thickness, the carrier material.

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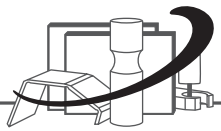

transparent plastics

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