

Technical datasheet

PC (polycarbonate)

Example of application			
 Machine covers, safety covers Insulating parts for the electrical industry Partitions, acoustic barriers 			
Advantage		Disadvantages	
 Good transparency (about 86 %) High notch toughness Cold moldable & thermally moldable to a limited extend Very high impact resistance, virtually indestructible 		 Poor chemical resistance Susceptibility to scratching 	
Basic information	Specification		
Format	Sheets: 2 – 6, 8, 10, 12, 15 and 20 mm available in 3,05 m x 2.05 m and 1.25 m x 2.05 m		
Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.2	g/cm ³	DIN EN ISO 1183
Moisture ingress	n.sp.	%	DIN EN ISO 62
Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	60	N/mm ²	DIN EN ISO 527
Elongation at break	80	%	DIN EN ISO 527
E-module	2.200	N/mm ²	DIN EN ISO 527
Notch toughness	fracture free	kJ/m²	DIN EN ISO 179
Rockwellhardness	n.sp.	n.sp.	
Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.2	W/(m·K)	DIN 52612
Linear thermal expansion coefficient	0.65	K ⁻¹ ·10 ⁻⁴	DIN 53752
	1.3	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, short-term	130	°C	
Min. operating temperature, long-term	-40	°C	
Max. operating temperature, long-term	115	°C	
Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10 ¹⁵	Ω·cm	DIN 53482
Outer surface coefficient	> 10 ¹⁵	Ω	DIN 53482
Puncture resistance	> 30	kV/mm	DIN 53481

Legend

n.sp.= not specified

*Higher specification on request.

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