

# Technical datasheet

## PC (polycarbonate) abrasion resistant flame retardant

Example of application			
<ul style="list-style-type: none"> <li>› housing for the electrical industry; Insulating parts in the electrical industry</li> <li>› applications in aviation</li> </ul>			
Advantage		Disadvantages	
<ul style="list-style-type: none"> <li>› scratch resistance</li> <li>› flame retardant</li> <li>› good chemical resistance</li> <li>› good transparency (about 85%)</li> <li>› physiologically harmless</li> <li>› cold mouldable</li> </ul>		<ul style="list-style-type: none"> <li>› moisture ingress</li> </ul>	
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/cm <sup>3</sup>	DIN EN ISO 1183
Moisture ingress	0.35	%	DIN EN ISO 63
Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	60	N/mm <sup>2</sup>	DIN EN ISO 527
Elongation at break	110	%	DIN EN ISO 527
E-module	2300	N/mm <sup>2</sup>	DIN EN ISO 527
Notch toughness	n.sp.	kJ/m <sup>2</sup>	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 <sup>-1</sup> ·10 <sup>-4</sup>	DIN 53752
	1.4	mm	At initial 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 <sup>16</sup>	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