

## Polycarbonate – Stock Shapes

### Chemical designation

PC

### Colour

clear

### Density

1.2 g/cm<sup>3</sup>

### Fillers

<b>Mechanical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Modulus of elasticity (tensile test)		2300	MPa	DIN 53457	
Tensile strength at yield		>60	MPa	DIN 53455	
Notched impact strength (Charpy)	At 23°C	50	kJ/m <sup>2</sup>	DIN 53453	
<b>Thermal properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Service temperature	long term	>100	°C		
Thermal expansion (CLTE)	23-60°C, long.	6.8	10 <sup>-5</sup> *K <sup>-1</sup>	DIN 53752	
Thermal conductivity		0.2	W/(K*m)	DIN 52612	
<b>Electrical properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Surface resistance			Ω		
Specific volume resistance			Ω*cm		
Dielectric strength			kV/mm		
<b>Other properties</b>	<b>parameter</b>	<b>value</b>	<b>unit</b>	<b>norm</b>	<b>comment</b>
Water absorption	saturation (23°C)	0.35	%	DIN 53495:A	
Light transmission 3mm		87-91	%	DIN 5036	
Refractive Index		1.586		DIN 53491	
Flammability	3mm	B1		DIN 4102	

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