

# POLYCARBONATE

GENERAL			
Property	Method	Units	
Density	EN ISO 1183	g/cm <sup>3</sup>	1,20
Water absorption saturation	EN ISO 62	%	0,30
Water absorption equilibrium	EN ISO 62	%	0,12

OPTICAL			
Property	Method	Units	
Light Transmission (clear) (3mm)	EN ISO 13468	%	87
Refractive Index (clear)	EN ISO 489	nD	1,587

MECHANICAL			
Property	Method	Units	
Yield stress	EN ISO 527	MPa	>60
Yield strain	EN ISO 527	%	6
Tensile modulus	EN ISO 527	MPa	2350
Flexural Strength	EN ISO 178	MPa	90
Flexural modulus	EN ISO 178	mPa	2350
Impact strength Charpy Unnotched	EN ISO 179	kJ/m <sup>2</sup>	non-break
Impact strength Charpy Notched	EN ISO 179	kJ/m <sup>2</sup>	80P
Nominal strain at break	EN ISO 527	%	>50

THERMAL			
Property	Method	Units	
Vicat softening temperature (B 50)	EN ISO 306	°C	148
Temperature of deflection underload (A 1,8 MPa)	EN ISO 75	°C	128
Coeff. of Linear Expansion	DIN 53752	K <sup>-1</sup>	0,65x10 <sup>-4</sup>
Thermal conductivity	EN ISO 8302	w/(m.K)	0,20

ELECTRICAL			
Property	Method	Units	
Relative permittivity (100Hz)	IEC 60250		3,1
Relative permittivity (1 kHz)	IEC 60250		3,0
Electrical Strength	IEC 60243	kVmm	34
Surface Resistivity	DIN 53482	Ω	1E <sup>16</sup>
Volume Resistivity	DIN 53482	Ωxm	1E <sup>14</sup>
Dissipation factor (100Hz)	IEC 60250	10 <sup>-4</sup>	5
Dissipation factor (1MHz)	IEC 60250	10 <sup>-4</sup>	95

FIRE REACTION	
EN 13501-1	B S1 d0
DIN 5510-2	S3 SR2 ST2
BS 476/7	Class 1Y
NFP 92-501 & 505	M2
UL 94	V0 (Limited range available on request)

PROCESSING		
<input checked="" type="checkbox"/> Sawing	<input checked="" type="checkbox"/> Flame polishing	<input checked="" type="checkbox"/> Vacuum forming
<input checked="" type="checkbox"/> Drilling	<input checked="" type="checkbox"/> Diamond polishing	<input checked="" type="checkbox"/> Drape forming
<input checked="" type="checkbox"/> Milling	<input checked="" type="checkbox"/> Cold bending	<input checked="" type="checkbox"/> Glueing
<input checked="" type="checkbox"/> Lasercutting	<input checked="" type="checkbox"/> Warm bending	<input checked="" type="checkbox"/> Printing
<input checked="" type="checkbox"/> Laser engraving	<input checked="" type="checkbox"/> Oven curving	

Suggestions and data on datasheet are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.