

Polycarbonate



Physical Properties	Nominal Value	Test Method
Density / Specific Gravity	1.2 g/cm ³	ISO1183-1
Water Absorption		
Saturation, 23°C	0.30%	ISO 62
Equilibrium, 23°C, 50% RH	0.12%	ISO 62
Refractice Index	1.587	ISO 489

Mechanical Properties	Nominal Value	Test Method
Tensile Modulus	2350 MPa	ISO 527-1
Yield Stress	> 60 Mpa	ISO 527-1
Yield Strain	6%	ISO 527-1
Strain at Break	120%	ISO 527-1
Flexural Modulus	2350 MPa	ISO 178
Flexural Strength	90 MPa	ISO 178

Impact Properties	Nominal Value	Test Method
Charpy Notched Impact Strength	80P kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	No Break	ISO 179
Notched Izod Impact	80P kJ/m ²	ISO 180

Thermal Properties	Nominal Value	Test Method
Deflection Temperature Under Load		
0.45 MPa	140 °C	ASTM D648
1.80 MPa	128 °C	ISO 75-2/B
Thermal Conductivity 23 °C	0.20 W/m/K	ISO 8302
Vicat Softening Temperature	50°C	ISO 306

Electrical Properties	Nominal Value	Test Method
Dielectric Strength	34 kV/mm	IEC 60243-1
Volume Resistivity	1E+15 ohms-cm	IEC 60093
Surface Resistivity	1E+16 ohms-cm	IEC 60093
Relative Permittivity - 100 Hz	5 x 10 ⁻⁴	IEC 60250
Relative Permittivity - 1 KHz	95 x 10 ⁻⁴	IEC 60250

Light Transmission	Sheet Thickness	%
	0.75	90
	1.0	90
	1.5	89
	2.0	89
	3.0	88
	4.0	87
	5.0	87
	6.0	86
	8.0	85
	10.0	83
	12.0	82
	15.0	80

The information provided in this datasheet is based upon average values and is intended for guidance purposes only.

Vital Parts assumes no responsibility or liability for the accuracy of the information contained on this datasheet.

Product samples are available to determine the suitability of the product for any application.