

# Kotex/Carbotex Polycarbonate



Grade: K-40UVR

General purpose injection moulding

Colour: Natural

Medium viscosity, UV stability, Mould release

Properties	Standards	Test conditions	Units	Typical values
<b>Mechanical Properties</b>				
Izod impact strength	ASTM D256	23°C V-notched 1/8"	J/m	830
			kgf·cm/cm	85
			ft·lbf/in	16
Tensile strength at break	ASTM D638	---	MPa	63
			kgf/cm <sup>2</sup>	640
			lbf/in <sup>2</sup>	9100
Tensile elongation at break	ASTM D638	---	%	120
Flexural strength	ASTM D790	---	MPa	85
			kgf/cm <sup>2</sup>	870
			lbf/in <sup>2</sup>	12400
Flexural modulus	ASTM D790	---	MPa	2160
			kgf/cm <sup>2</sup>	22000
			lbf/in <sup>2</sup>	313000
<b>Thermal Properties</b>				
Melt flow rate	ASTM D1238	300°C, 1.2kgf	g/10min	12
Heat deflection temperature	ASTM D648	18.6 kgf/cm <sup>2</sup>	°C	133
			°F	271
<b>Electrical Properties</b>				
Dielectric breakdown strength	ASTM D149	1.6mm	kV/mm	20
Dielectrical constant	ASTM D150	10 <sup>6</sup> Hz	---	2.9
Dissipation factor	ASTM D150	10 <sup>6</sup> Hz	---	0.009
Arc resistance	ASTM D495	---	Sec.	110
Volume resistivity	ASTM D257	---	Ω·cm	10 <sup>16</sup>
<b>Optical Properties</b>				
Light transmittance	ASTM D1003	3 mm	%	89
Light refractive	ASTM D542	---	---	1.58
Haze	ASTM D1003	3 mm	%	< 1
<b>Other Properties</b>				
Specific gravity	ASTM D792	---	---	1.2
Water absorption	ASTM D570	24 hrs at 23°C water immersion	%	≤ 0.2
Mould shrinkage	ASTM D955	---	%	0.5~0.7
Flammability	UL94	---	---	V-2 @ 1.6mm

To our best knowledge, the values contained herein are typical of uncoloured PC and given in good faith. They may be affected by colorants, other additives, the design of a mould/die, moulding techniques applied, the size and shape of a moulded article. In view of these factors, the properties do not relieve customers from carrying out their own investigations and tests. It is entirely the customer's responsibility to determine the suitability of material and grade used for their intended application. No warranty, express or implied is made nor is liability accepted in connection with any of the information provided. We reserve the right to make additions, deletions, or modifications to the information at any time without prior notification. Kotec Corporation (30.5.2006)