## Carbotex Polycarbonate



Grade: K-20MRA General purpose injection moulding

Colour: Clear High flow, Mould release

Properties	Standards	Test conditions	Units	Typical values
Mechanical Properties				
Izod impact strength	ASTM D256	23°C V-notched 1/8"	J/m	740
			kgf•cm/cm	75
			ft•lbf/in	14
Tensile strength at break			MPa	63
	ASTM D638		kgf/cm <sup>2</sup>	640
			lbf/in <sup>2</sup>	9100
Tensile elongation at break	ASTM D638		%	120
Flexural strength			MPa	85
	ASTM D790		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
Thermal Properties				
Melt flow rate	ASTM D1238	300°C, 1.2kgf	g/10min	20
Heat deflection temperature	ASTM D648	18.6 kgf/cm <sup>2</sup>	°C	131
			°F	267
<b>Electrical Properties</b>				
Dielectric breakdown strength	ASTM D149	1.6mm	kV/mm	20
Dielectrical constant	ASTM D150	$10^6\mathrm{Hz}$		2.9
Dissipation factor	ASTM D150	$10^6\mathrm{Hz}$		0.009
Arc resistance	ASTM D495		Sec.	110
Volume resistively	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
Other Properties				
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 @ 0.4mm

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 (30.3.2009)