Kotex/Carbotex Polycarbonate

KOTEC

Grade: KGN-20MRA — Glass fiber 20% reinforced

Colour: Natural — High viscosity, Mould release, Flame retardant

Properties	Standards	Test conditions	Units	Typical values
Mechanical Properties				
Izod impact strength	ASTM D256	23℃ V-notched 1/8"	J/m	90
			kgf·cm/cm	9
			ft·lbf/in	1.6
Tensile strength at break	ASTM D638	---	MPa	108
			kgf/cm^2	1100
			lbf/in^2	15600
Tensile elongation at break	ASTM D638	---	%	4
Flexural strength	ASTM D790	---	MPa	152
			kgf/cm^2	1550
			lbf/in^2	22000
Flexural modulus	ASTM D790	---	MPa	5690
			kgf/cm^2	58000
			lbf/in^2	824000
Thermal Properties				
Melt flow rate	ASTM D1238	300℃, 1.2kgf	g/10min	---
Heat deflection temperature	ASTM D648	18.6 kgf/cm^2	℃	145
			℉	293
Electrical Properties				
Dielectric breakdown strength	ASTM D149	1.6mm	kV/mm	20
Dielectrical constant	ASTM D150	10^6 Hz	---	3.2
Dissipation factor	ASTM D150	10^6 Hz	---	0.008
Arc resistance	ASTM D495	---	Sec.	110
Volume resistivity	ASTM D257	---	Ω·cm	10^{16}
Optical Properties				
Light transmittance	ASTM D1003	3 mm	%	---
Light refractive	ASTM D542	---	---	---
Haze	ASTM D1003	3 mm	%	Translucent
Other Properties				
Specific gravity	ASTM D792	---	---	1.35
Water absorption	ASTM D570	24 hrs at 23℃ water immersion	%	≦ 0.2
Mould shrinkage	ASTM D955	---	%	0.3～0.5
Flammability	UL94	---	---	V-0 @ 1.7 mm

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)