

Chi Mei Wonderlite® PC-6600

Flame retardant (non-brominated, and non-chlorinated), 1.0mm V0. Applications: Electrical appliances.

WONDERLITE® is a polycarbonate (PC) resin polymerized using the double hydroxy compounds of bisphenol-A (BPA) and the carbonate compounds of diphenyl carbonate (DPC), produced via our unique transesterification (melting) method.

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	ISO 294-4
Melt Flow	10 g/10 min @Load 1.20 kg, Temperature 300 °C	10 g/10 min @Load 2.65 lb, Temperature 572 °F	Melt Volume Rate (ml/10 min.); ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	70.0 MPa	10200 psi	50mm/min; ISO 527
Tensile Strength, Yield	60.0 MPa	8700 psi	50 mm/min; ISO 527
Elongation at Break	120 %	120 %	50mm/min; ISO 527
Flexural Strength	90.0 MPa	13100 psi	2mm/min; ISO 178
Flexural Modulus	2.30 GPa	334 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	15.0 kJ/m ² @Thickness 3.17 mm, Temperature -30.0 °C	7.14 ft-lb/in ² @Thickness 0.125 in, Temperature -22.0 °F	ISO 180/1A
	60.0 kJ/m ² @Thickness 3.17 mm, Temperature 23.0 °C	28.6 ft-lb/in ² @Thickness 0.125 in, Temperature 73.4 °F	ISO 180/1A
Charpy Impact, Notched	1.50 J/cm ² @Temperature -30.0 °C	7.14 ft-lb/in ² @Temperature -22.0 °F	1/8"; ISO 179
	6.00 J/cm ² @Temperature 23.0 °C	28.6 ft-lb/in ² @Temperature 73.4 °F	1/8"; ISO 179

Electrical Properties	Metric	English	Comments
Volume Resistivity	3.60e+14 ohm-cm	3.60e+14 ohm-cm	IEC 60093
Surface Resistance	9.30e+14 ohm	9.30e+14 ohm	IEC60093
Dielectric Constant	3.0 @Frequency 1e+6 Hz	3.0 @Frequency 1e+6 Hz	IEC 60250

Thermal Properties	Metric	English	Comments
CTE, linear	67.0 µm/m-°C	37.2 µin/in-°F	ISO 11359
Deflection Temperature at 1.8 MPa (264 psi)	125 °C	257 °F	Unannealed; ISO 75/A
	140 °C	284 °F	Annealed; ISO 75/A
Vicat Softening Point	145 °C @Load 5.00 kg	293 °F @Load 11.0 lb	50°C/hr; ISO 306
	150 °C @Load 1.00 kg	302 °F @Load 2.20 lb	50°C/hr; ISO 306
Flammability, UL94	V-0 @Thickness 1.00 mm	V-0 @Thickness 0.0394 in	
	5VB @Thickness 2.00 mm	5VB @Thickness 0.0787 in	
	5VA @Thickness 3.00 mm	5VA @Thickness 0.118 in	