

# Covestro Bayblend® T65 PG

(PC+ABS) blend; unreinforced; grade with improved low-temperature impact strength and chemical resistance for automotive parts; also suitable for extrusion/extrusion blow molding and electroplating applications.

Physical Properties	Metric	English	Comments
Density	1.13 g/cc	0.0408 lb/in <sup>3</sup>	ISO 1183-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62
Water Absorption at Saturation	0.70 %	0.70 %	ISO 62
Viscosity	200000 cP @Frequency 1000 Hz, Temperature 260 °C	200000 cP @Frequency 1000 Hz, Temperature 500 °F	Melt
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	150 x 105 x 3 mm; 260 °C / mold 80 °C; b. o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	150 x 105 x 3 mm; 260 °C / mold 80 °C; b. o. ISO 2577
Melt Flow	20.34 g/10 min @Load 5.00 kg, Temperature 260 °C	20.34 g/10 min @Load 11.0 lb, Temperature 500 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	47.0 MPa	6820 psi	50 mm/min; ISO 527-1,-2
Tensile Strength, Yield	54.0 MPa	7830 psi	50 mm/min; ISO 527-1,-2
Elongation at Break	>= 50 %	>= 50 %	50 mm/min; ISO 527-1,-2
Elongation at Yield	4.4 %	4.4 %	50 mm/min; ISO 527-1,-2
Tensile Modulus	2.40 GPa	348 ksi	1 mm/min; ISO 527-1,-2
Izod Impact, Notched (ISO)	36.0 kJ/m <sup>2</sup> @Temperature -30.0 °C	17.1 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 180-A
	40.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	19.0 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 180-A
Izod Impact, Unnotched (ISO)	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 180-U
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 180-U

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	IEC 60093
Dielectric Constant	3.0 @Frequency 1e+6 Hz	3.0 @Frequency 1e+6 Hz	IEC 60250
	3.1 @Frequency 100 Hz	3.1 @Frequency 100 Hz	IEC 60250
Dielectric Strength	35.0 kV/mm @Thickness 1.00 mm	889 kV/in @Thickness 0.0394 in	IEC 60243-1
Dissipation Factor	0.0030 @Frequency 100 Hz	0.0030 @Frequency 100 Hz	IEC 60250
	0.0085 @Frequency 1e+6 Hz	0.0085 @Frequency 1e+6 Hz	IEC 60250

Comparative Tracking Index

250 V

250 V

Solution A; IEC  
60112

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 $\mu\text{m}/\text{m}\cdot\text{C}$ @Temperature 23.0 - 55.0 $^{\circ}\text{C}$	44.4 $\mu\text{in}/\text{in}\cdot\text{F}$ @Temperature 73.4 - 131 $^{\circ}\text{F}$	ISO 11359-1, -2
CTE, linear, Transverse to Flow	85.0 $\mu\text{m}/\text{m}\cdot\text{C}$ @Temperature 23.0 - 55.0 $^{\circ}\text{C}$	47.2 $\mu\text{in}/\text{in}\cdot\text{F}$ @Temperature 73.4 - 131 $^{\circ}\text{F}$	ISO 11359-1, -2
Deflection Temperature at 0.46 MPa (66 psi)	122 $^{\circ}\text{C}$	252 $^{\circ}\text{F}$	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	102 $^{\circ}\text{C}$	216 $^{\circ}\text{F}$	ISO 75-1,-2
Vicat Softening Point	118 $^{\circ}\text{C}$ @Load 5.10 kg	244 $^{\circ}\text{F}$ @Load 11.2 lb	50 $^{\circ}\text{C}/\text{h}$ ; ISO 306
	120 $^{\circ}\text{C}$ @Load 5.10 kg	248 $^{\circ}\text{F}$ @Load 11.2 lb	120 $^{\circ}\text{C}/\text{h}$ ; ISO 306
Flammability, UL94	HB @Thickness 0.850 mm	HB @Thickness 0.0335 in	

Processing Properties	Metric	English	Comments
Melt Temperature	260 $^{\circ}\text{C}$	500 $^{\circ}\text{F}$	Injection; ISO 294
Mold Temperature	80.0 $^{\circ}\text{C}$	176 $^{\circ}\text{F}$	Injection; ISO 294
Injection Velocity	240 mm/sec	9.45 in/sec	ISO 294