

Covestro Bayblend® T88 GF-10

Rubber modified (PC+SAN) blend; 10% glass fibre reinforced; Vicat/B 120 temperature = 134 °C; optimized heat ageing- and UV-stability; very good flow; tensile modulus = 4800 MPa;; good heat resistance

Physical Properties	Metric	English	Comments
Density	1.22 g/cc	0.0441 lb/in ³	ISO 1183
Filler Content	10 %	10 %	Glass, Method A; b.o. ISO 3451-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62
Water Absorption at Saturation	0.40 %	0.40 %	ISO 62
Viscosity	205000 cP @Shear Rate 1000 1/s, Temperature 260 °C	205000 cP @Shear Rate 1000 1/s, Temperature 500 °F	b.o. ISO 11443-A
Linear Mold Shrinkage, Flow	0.0025 - 0.0045 cm/cm @Thickness 3.00 mm	0.0025 - 0.0045 in/in @Thickness 0.118 in	150x105x3 mm; 260 °C / MT 80 °C; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0035 - 0.0055 cm/cm @Thickness 3.00 mm	0.0035 - 0.0055 in/in @Thickness 0.118 in	150x105x3 mm; 260 °C / MT 80 °C; b.o. ISO 2577
Melt Flow	19.52 g/10 min @Load 5.00 kg, Temperature 260 °C	19.52 g/10 min @Load 11.0 lb, Temperature 500 °F	ISO 1133
Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	95.0 MPa	13800 psi	5 mm/min; ISO 527-1/-2
Tensile Strength, Yield	100 MPa	14500 psi	5 mm/min; ISO 527-1/-2
Elongation at Break	3.7 %	3.7 %	5 mm/min; ISO 527-1/-2
Elongation at Yield	3.2 %	3.2 %	5 mm/min; ISO 527-1/-2
Tensile Modulus	4.80 GPa	696 ksi	1 mm/min; ISO 527-1/-2
Izod Impact, Notched (ISO)	6.00 kJ/m ² @Temperature -30.0 °C	2.86 ft-lb/in ² @Temperature -22.0 °F	ISO 180-A
	8.00 kJ/m ² @Temperature 23.0 °C	3.81 ft-lb/in ² @Temperature 73.4 °F	ISO 180-A
Izod Impact, Unnotched (ISO)	35.0 kJ/m ² @Temperature 23.0 °C	16.7 ft-lb/in ² @Temperature 73.4 °F	ISO 180-U
	35.0 kJ/m ² @Temperature -30.0 °C	16.7 ft-lb/in ² @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
	3.2 @Frequency 100 Hz	3.2 @Frequency 100 Hz	IEC 60250
Dielectric Strength	35.0 kV/mm	889 kV/in	1 mm; IEC 60243-1
Dissipation Factor	0.0025 @Frequency 100 Hz	0.0025 @Frequency 100 Hz	IEC 60250
	0.0090 @Frequency 1e+6 Hz	0.0090 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	200 V	200 V	Solution A; IEC 60112

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	40.0 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 23.0 - 55.0 $^{\circ}\text{C}$	22.2 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 73.4 - 131 $^{\circ}\text{F}$	ISO 11359-1,-2
CTE, linear, Transverse to Flow	67.0 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 23.0 - 55.0 $^{\circ}\text{C}$	37.2 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 73.4 - 131 $^{\circ}\text{F}$	ISO 11359-1,-2
Deflection Temperature at 0.46 MPa (66 psi)	133 $^{\circ}\text{C}$	271 $^{\circ}\text{F}$	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	121 $^{\circ}\text{C}$	250 $^{\circ}\text{F}$	ISO 75-1/-2
Vicat Softening Point	132 $^{\circ}\text{C}$ @Load 5.10 kg	270 $^{\circ}\text{F}$ @Load 11.2 lb	50 $^{\circ}\text{C}/\text{h}$; ISO 306
	134 $^{\circ}\text{C}$ @Load 5.10 kg	273 $^{\circ}\text{F}$ @Load 11.2 lb	120 $^{\circ}\text{C}/\text{h}$; ISO 306
Flammability, UL94	HB @Thickness 0.850 mm	HB @Thickness 0.0335 in	IEC 60695-11-10

Processing Properties	Metric	English	Comments
Melt Temperature	260 $^{\circ}\text{C}$	500 $^{\circ}\text{F}$	Injection Molding; ISO 294
Mold Temperature	80.0 $^{\circ}\text{C}$	176 $^{\circ}\text{F}$	Injection Molding; ISO 294
Injection Velocity	540 mm/sec	21.3 in/sec	ISO 294