

Covestro Bayblend® T90 HT

PC+ABS)-Blend; high heat resistance; Vicat/B 120 temperature = 135 °C; easy flowing; ball indentation temperature >= 125 °C; suitable as supporting material for energized parts
As of 1 September 2015, Bayer MaterialScience was separated from Bayer AG and officially adopted its new name – Covestro.

Physical Properties	Metric	English	Comments
Density	1.16 g/cc	0.0419 lb/in ³	ISO 1183-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62
Water Absorption at Saturation	0.70 %	0.70 %	ISO 62
Viscosity	250000 cP @Shear Rate 1000 1/s, Temperature 260 °C	250000 cP @Shear Rate 1000 1/s, Temperature 500 °F	melt; b.o. ISO 11443-a
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm @Thickness 3.00 mm	0.0060 - 0.0080 in/in @Thickness 0.118 in	150x105x3 mm; 260 °C / MT 80 °C; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0060 - 0.0080 cm/cm @Thickness 3.00 mm	0.0060 - 0.0080 in/in @Thickness 0.118 in	150x105x3 mm; 260 °C / MT 80 °C; b.o. ISO 2577
Melt Flow	30 g/10 min @Load 5.00 kg, Temperature 260 °C	30 g/10 min @Load 11.0 lb, Temperature 500 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	48.0 MPa	6960 psi	50 mm/min; ISO 527-1/-2
Tensile Strength, Yield	56.0 MPa	8120 psi	50 mm/min; ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	50 mm/min; ISO 527-1/-2
Elongation at Yield	5.0 %	5.0 %	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)	21.0 kJ/m ² @Temperature -30.0 °C	9.99 ft-lb/in ² @Temperature -22.0 °F	ISO 180-A
	44.0 kJ/m ² @Temperature 23.0 °C	20.9 ft-lb/in ² @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+17 ohm	1.00e+17 ohm	IEC 60093
Dielectric Constant	2.9	2.9	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	3.1	3.1	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	35.0 kV/mm	889 kV/in	IEC 60243-1
	@Thickness 1.00 mm	@Thickness 0.0394 in	
Dissipation Factor	0.0015	0.0015	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.0090	0.0090	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	129 °C	264 °F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	110 °C	230 °F	ISO 75-1,-2
Vicat Softening Point	133 °C	271 °F	50°C/h; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
	135 °C	275 °F	120°C/h; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	HB	HB	
	@Thickness 0.850 mm	@Thickness 0.0335 in	

Processing Properties	Metric	English	Comments
Melt Temperature	260 °C	500 °F	Injection Molding; ISO 294
Mold Temperature	80.0 °C	176 °F	Injection Molding; ISO 294
Injection Velocity	240 mm/sec	9.45 in/sec	ISO 294