

Covestro Bayblend® FR 3000 HI

(PC+ABS)-Blend; flame retardant; Vicat/B 120 temperature = 97 °C; compared to FR3000 improved chemical resistance and stress cracking behavior; UL recognition 94 V-0 at 1.5 mm
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	1.18 g/cc	0.0426 lb/in ³	ISO 1183
Water Absorption	0.50 %	0.50 %	Similar to ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	Similar to ISO 62
Viscosity	185000 cP @Temperature 260 °C	185000 cP @Temperature 500 °F	1000 s-1; b.o. ISO 11443-A
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	150x105x3 mm; 240 °C / MT 80 °C; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	150x105x3 mm; 240 °C / MT 80 °C; b.o. ISO 2577
Melt Flow	24 g/10 min @Load 5.00 kg, Temperature 240 °C	24 g/10 min @Load 11.0 lb, Temperature 464 °F	estimated from MVR using room temperature density; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	45.0 MPa	6530 psi	50 mm/min; ISO 527-1/-2
Tensile Strength, Yield	60.0 MPa	8700 psi	50 mm/min; ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	50 mm/min; b.o. ISO 527-1/-2
Elongation at Yield	4.0 %	4.0 %	50 mm/min; ISO 527-1/-2
Tensile Modulus	2.70 GPa	392 ksi	1 mm/min; ISO 527-1/-2
Izod Impact, Notched (ISO)	35.0 kJ/m ²	16.7 ft-lb/in ²	ISO 180-A
	10.0 kJ/m ² @Temperature -30.0 °C	4.76 ft-lb/in ² @Temperature -22.0 °F	ISO 180-A
Izod Impact, Unnotched (ISO)	NB	NB	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	3.1 @Frequency 1e+6 Hz	3.1 @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	0.0050 @Frequency 100 Hz	0.0050 @Frequency 100 Hz	IEC 60250
	0.0060 @Frequency 1e+6 Hz	0.0060 @Frequency 1e+6 Hz	IEC 60250

