

Covestro Bayblend® FR3200

PC+ABS)-Blend; flame retardant; easy flowing; for high gloss applications; RHCM process etc.; Vicat/B 120 temperature = 96 °C; UL recognition 94 V-0 at 1.2 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	1.195 g/cc	0.04317 lb/in ³	ISO 1183-1
Linear Mold Shrinkage, Flow	0.0050 cm/cm @Thickness 3.00 mm	0.0050 in/in @Thickness 0.118 in	150x105x3 mm; 240 °C / MT 80 °C; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0050 cm/cm @Thickness 3.00 mm	0.0050 in/in @Thickness 0.118 in	150x105x3 mm; 240 °C / MT 80 °C; b.o. ISO 2577
Melt Flow	37.05 g/10 min @Load 5.00 kg, Temperature 240 °C	37.05 g/10 min @Load 11.0 lb, Temperature 464 °F	ISO 1133
Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	46.0 MPa	6670 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	3.7 %	3.7 %	50 mm/min; ISO 527-1,-2
Tensile Modulus	2.60 GPa	377 ksi	1 mm/min; ISO 527-1,-2
Izod Impact, Notched (ISO)	25.0 kJ/m ² @Temperature 23.0 °C	11.9 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
Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	72.0 µm/m-°C @Temperature 23.0 - 55.0 °C	40.0 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1,-2

CTE, linear, Transverse to Flow	74.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature 23.0 - 55.0 $^\circ\text{C}$	41.1 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @Temperature 73.4 - 131 $^\circ\text{F}$	ISO 11359-1,-2
Deflection Temperature at 0.46 MPa (66 psi)	87.0 $^\circ\text{C}$	189 $^\circ\text{F}$	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	80.0 $^\circ\text{C}$	176 $^\circ\text{F}$	ISO 75-1,-2
Vicat Softening Point	96.0 $^\circ\text{C}$ @Load 5.10 kg	205 $^\circ\text{F}$ @Load 11.2 lb	120 $^\circ\text{C}/\text{h}$; ISO 306
Flammability, UL94	V-0 @Thickness 1.20 mm	V-0 @Thickness 0.0472 in	

Processing Properties	Metric	English	Comments
Melt Temperature	240 $^\circ\text{C}$	464 $^\circ\text{F}$	Injection molding; ISO 294
Mold Temperature	80.0 $^\circ\text{C}$	176 $^\circ\text{F}$	Injection molding; ISO 294
Injection Velocity	240 mm/sec	9.45 in/sec	ISO 294