

Covestro Bayblend® FR3210 TV

(PC+ABS)-Blend; flame retardant; easy flowing; Vicat/B 120 temperature = 93 °C; improved surface quality; 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	1.18 g/cc	0.0426 lb/in³	ISO 1183-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62, 50% RH
Water Absorption at Saturation	0.50 %	0.50 %	ISO 62
Viscosity	135000 cP @Shear Rate 1000 1/s, Temperature 260 °C	135000 cP @Shear Rate 1000 1/s, Temperature 500 °F	melt viscosity; b.o. ISO 11443-A
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.00 mm	0.0050 - 0.0070 in/in @Thickness 0.118 in	150x105x3mm; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm @Thickness 3.00 mm	0.0050 - 0.0070 in/in @Thickness 0.118 in	150x105x3mm; b.o. ISO 2577
Melt Flow	45 g/10 min @Load 5.00 kg, Temperature 240 °C	45 g/10 min @Load 11.0 lb, Temperature 464 °F	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	>= 30 %	>= 30 %	50 mm/min; b.o. ISO 527-1,-2
Elongation at Yield	3.5 %	3.5 %	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)	30.0 kJ/m² @Temperature 23.0 °C	14.3 ft-lb/in² @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	75.0 µm/m-°C @Temperature 23.0 - 55.0 °C	41.7 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1,-2
CTE, linear, Transverse to Flow	75.0 µm/m-°C @Temperature 23.0 - 55.0 °C	41.7 µin/in-°F @Temperature 73.4 - 131 °F	ISO 11359-1,-2
Deflection Temperature at 0.46 MPa (66 psi)	85.0 °C	185 °F	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	76.0 °C	169 °F	ISO 75-1,-2
Vicat Softening Point	91.0 °C @Load 5.10 kg	196 °F @Load 11.2 lb	50°C/h; ISO 306
	93.0 °C @Load 5.10 kg	199 °F @Load 11.2 lb	120°C/h; ISO 306
Flammability, UL94	V-0 @Thickness 1.20 mm	V-0 @Thickness 0.0472 in	
	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	
Processing Properties	Metric	English	Comments
Melt Temperature	240 °C	464 °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