Bayblend® FR3305 TV

FR grades / 10 % Glass fiber reinforced (PC+ABS)-Blend; 10% glass fibre reinforced; flame retardant; Vicat/B 120 temperature = 103 °C; UL recognition 94 V-0 at 1.2 mm; UL recognition 94 V-1 at 1.0 mm

ISO Shortname PC+ABS-GF10-FR(40)

	Property	Test Condition	Unit	Standard	typical Value
Rheological properties					
C	Melt volume-flow rate	240 °C; 5 kg	cm³/10 min	ISO 1133	16
	Melt viscosity	1000 s^{-1}; 260 °C	Pa·s	b.o. ISO 11443-A	185
	Molding shrinkage, parallel	150x105x3 mm; 260 °C / MT 80 °C	%	b.o. ISO 2577	0.3-0.5
	Molding shrinkage, normal	150x105x3 mm; 260 °C / MT 80 °C	%	b.o. ISO 2577	0.3-0.5
Mechanical properties (23 °C/50 % r. h.)					
C	Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	4350
	Yield stress	5 mm/min	MPa	ISO 527-1,-2	75
	Yield strain	5 mm/min	%	ISO 527-1,-2	3
C	Stress at break	5 mm/min	MPa	ISO 527-1,-2	75
C	Strain at break	5 mm/min	%	ISO 527-1,-2	4
	Izod impact strength	23 °C	kJ/m²	ISO 180-U	35
	Izod notched impact strength	23 °C	kJ/m²	ISO 180-A	7
Thermal properties					
C	Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	92
C	Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	98
C	Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	101
	Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	103
C	Coefficient of linear thermal expansion, parallel	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	0.5
C	Coefficient of linear thermal expansion, transverse	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	0.7
C	Burning behavior UL 94 (1.5 mm) [UL recognition]	1.5 mm	Class	UL 94	V-0
C	Burning behavior UL 94 [UL recognition]	1.2 mm	Class	UL 94	V-0
C	Burning behavior UL 94-5V	3.0 mm	Class	UL 94	5VA
	Burning behavior UL 94-5V	2.0 mm	Class	UL 94	5VB
Electrical properties (23 °C/50 % r. h.)					
C	Relative permittivity	100 Hz	-	IEC 60250	3.3
C	Relative permittivity	1 MHz	-	IEC 60250	3.2
C	Dissipation factor	100 Hz	10^{-4}	IEC 60250	50
C	Dissipation factor	1 MHz	10^{-4}	IEC 60250	70
C	Volume resistivity		Ohm·m	IEC 60093	1E14
C	Surface resistivity		Ohm	IEC 60093	1E16
C	Electrical strength	1 mm	kV/mm	IEC 60243-1	35
C	Comparative tracking index CTI	Solution A	Rating	IEC 60112	175
Other properties (23 °C)					
C	Water absorption (saturation value)	Water at 23 °C	%	ISO 62	0.4
C	Water absorption (equilibrium value)	23 °C; 50 % r. h.	%	ISO 62	0.1
C	Density		kg/m³	ISO 1183-1	1280
Processing conditions for test specimens					
C	Injection molding-Melt temperature		°C	ISO 294	260
C	Injection molding-Mold temperature		°C	ISO 294	80
C	Injection molding-Injection velocity		mm/s	ISO 294	240

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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Impact properties: N = non-break, P = partial break, C = complete break

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Disclaimer

Information Impact properties

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Typical value

These values are typical values only. Unless explicitly agreed in written form, the do not constitute a binding material specification or warranted values. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the property values given have been established on standardized test specimens at room temperature.

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