

# Bayblend® FR3005 BBS310

## FR grades / Non reinforced

(PC+ABS)-Blend; flame retardant; Vicat/B 120 temperature = 89 °C; improved chemical resistance; UL recognition 94 V-0 at 1.5 mm

## ISO Shortname

PC+ABS-FR(40)

Property	Test Condition	Unit	Standard	typical Value
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### Rheological properties

C Melt volume-flow rate	240 °C; 5 kg	cm³/10 min	ISO 1133	30
C Molding shrinkage, parallel	150x105x3 mm; 240 °C / MT 80 °C	%	b.o. ISO 2577	0.5 - 0.7
C Molding shrinkage, normal	150x105x3 mm; 240 °C / MT 80 °C	%	b.o. ISO 2577	0.5 - 0.7

### Mechanical properties (23 °C/50 % r. h.)

C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2650
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	60
C Yield strain	50 mm/min	%	ISO 527-1,-2	3.6
Stress at break	50 mm/min	MPa	ISO 527-1,-2	45
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	39
Izod notched impact strength	23 °C	kJ/m²	ISO 180-A	14
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	N

### Thermal properties

C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	74
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	83
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	89
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10⁻⁴/K	ISO 11359-1,-2	0.76
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10⁻⁴/K	ISO 11359-1,-2	0.8
C Burning behavior UL 94 (1.5 mm)	1.5 mm	Class	UL 94	V-0
C Burning behavior UL 94-5V	1.5 mm	Class	UL 94	5VB

### Other properties (23 °C)

C Water absorption (saturation value)	Water at 23 °C	%	ISO 62	0.5
C Water absorption (equilibrium value)	23 °C; 50 % r. h.	%	ISO 62	0.2
C Density		kg/m³	ISO 1183-1	1190

### Processing conditions for test specimens

C Injection molding-Melt temperature		°C	ISO 294	240
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.

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





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## Disclaimer

### Information Impact properties

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

### Typical value

These values are typical values only. Unless explicitly agreed in written form, they 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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