

Bayblend® FR3025

FR grades / Mineral filled

(PC+ABS)-Blend; flame retardant; mineral filled ; Vicat/B 120 temperature = 102 °C; UL recognition 94 V-0 at 1.2 mm; low warpage; improved stiffness and surface quality; for notebooks and thinwall applications

ISO Shortname

PC+ABS-(TD11+QD15)-FR(40)

Property	Test Condition	Unit	Standard	typical Value
Rheological properties				
C Melt volume-flow rate	260 °C/ 5 kg	cm ³ /10 min	ISO 1133	27
C Melt viscosity	1000 s ⁻¹ / 260 °C	Pa·s	b.o. ISO 11443-A	230
C Molding shrinkage, parallel	60x60x2 mm	%	ISO 294-4	0.2
C Molding shrinkage, normal	60x60x2 mm	%	ISO 294-4	0.3
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	6300
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	59
C Yield strain	50 mm/min	%	ISO 527-1,-2	2.8
C Stress at break	50 mm/min	MPa	ISO 527-1,-2	52
C Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	5.8
C Izod impact strength	23 °C	kJ/m ²	ISO 180-U	40
C Izod impact strength	-30 °C	kJ/m ²	ISO 180-U	30
C Izod notched impact strength	23 °C	kJ/m ²	ISO 180-A	6
C Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-A	5
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	50
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	45
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	6
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	4
C Puncture maximum force	23 °C	N	ISO 6603-2	2600
C Puncture maximum force	-30 °C	N	ISO 6603-2	1100
C Puncture energy	23 °C	J	ISO 6603-2	13
C Puncture energy	-30 °C	J	ISO 6603-2	2
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	90
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	96
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	100
C Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	102
C Burning behavior UL 94 [UL recognition]	1.2 mm	Class	UL 94	V-0
C Burning behavior UL 94 [UL recognition]	0.75 mm	Class	UL 94	V-1
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/m ³	ISO 1183-1	1402
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

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Property	Test Condition	Unit	Standard	typical Value
Recommended Processing and Drying Conditions				
Melt Temperatures		°C	-	270-300
Standard Melt Temperature		°C	-	290
Barrel Temperatures - Rear		°C	-	240-260
Barrel Temperatures - Middle		°C	-	250-280
Barrel Temperatures - Front		°C	-	270-300
Barrel Temperatures - Nozzle		°C	-	270-300
Mold Temperatures		°C	-	65-100
Hold Pressure (% of injection pressure)		%	-	50-75
Plastic Back Pressure (specific)		bar	-	50-100
Peripheral Screw Speed		m/s	-	0.1-0.3
Shot-to-Cylinder Size		%	-	30-70
Dry Air Drying Temperature		°C	-	85
Dry Air Drying Time		h	-	2-4
Moisture Content max. (%)		%	-	0.02
Vent Depth		mm	-	0.02-0.04

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