

Bayblend T85

To get more information on injection molding materials please visit: http://www.vistatek.com/injection_materials.html

Standard grades / Non reinforced

General purpose injection molding grade; Vicat/B 120 temperature = 131°C; high impact and notched impact strength.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
C Melt volume-flow rate	260 °C; 5 kg	cm ³ /10 min	ISO 1133	12
Molding shrinkage, parallel	150x105x3; 260 °C / MT 80 °C	%	b.o. ISO 2577	0.55 - 0.75
Molding shrinkage, normal	150x105x3; 260 °C / MT 80 °C	%	b.o. ISO 2577	0.55 - 0.75
Melt viscosity	1000 s ⁻¹ ; 260 °C	Pa·s	b.o. ISO 11443-A	290
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2300
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	55
C Yield strain	50 mm/min	%	ISO 527-1,-2	4.7
Stress at break	50 mm/min	MPa	ISO 527-1,-2	48
Strain at break	50 mm/min	%	b.o. ISO 527-1,-2	> 50
Izod impact strength	23 °C	kJ/m ²	ISO 180-U	N
Izod impact strength	-30 °C	kJ/m ²	ISO 180-U	N
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-A	48
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-A	38
Thermal properties				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	109
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	127
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	129
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	131
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.75
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 [UL recognition]	0.85 mm	Class	UL 94	HB
Electrical properties (23 °C/50 % r. h.)				
C Relative permittivity	100 Hz	-	IEC 60250	3.1
C Relative permittivity	1 MHz	-	IEC 60250	3.0
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	20
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	85
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	225
Other properties (23 °C)				
C Water absorption (saturation value)	Water at 23 °C	%	ISO 62	0.7
C Water absorption (equilibrium value)	23 °C; 50 % r. h.	%	ISO 62	0.2
C Density		kg/m ³	ISO 1183-1	1150
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.

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