

Bayblend T85

General purpose grades / Standard

(PC+ABS) blend; unreinforced; general purpose injection molding grade; high heat resistance; Vicat/B 120 temperature = 131°C; high impact and notched impact strength.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Spiral flow length	0.100 in, 490 °F melt temperature	in	Bayer test	20
Melt mass-flow rate	260 °C; 5 kg	g/10 min	ASTM D1238	12
Molding shrinkage, parallel	500 bar	in/in	ASTM D955	0.0055-0.0075
Molding shrinkage, normal	500 bar	in/in	ASTM D955	0.0055-0.0075
Mechanical properties (23 °C/50 % r. h.)				
Tensile modulus	1 mm/min	lb/in ²	ASTM D638	334000
Tensile stress at yield	73 °F, 0.2 in/min	lb/in ²	ASTM D638	8000
Tensile elongation at yield	73 °F, 0.2 in/min	%	ASTM D638	4.7
Tensile stress at break	73 °F, 0.2 in/min	lb/in ²	ASTM D638	7000
Tensile elongation at break	73 °F, 0.2 in/min	%	ASTM D638	> 50
Unnotched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D4812	no break
Izod notched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D256	13
Flexural modulus	-	lb/in ²	ASTM D790	335000
Flexural stress at 5 % strain	-	lb/in ²	ASTM D790	13000
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.250 in	°F	ASTM D648	226
Deflection temperature under load, Unannealed	66 psi; 0.250 in	°F	ASTM D648	260
Vicat softening temperature	Rate B; 5 kg; 120 °C/h	°F	ASTM D1525	268
Coefficient of linear thermal expansion, flow/cross-flow	-	in/in/°F	ISO 11359-1,-2	4.6E-5
UL94 Flame Class [UL recognition]	Thickness tested: 0.85 mm	Class	UL 94	HB
Electrical properties (23 °C/50 % r. h.)				
Relative permittivity	100 Hz	-	IEC 60250	3.1
Relative permittivity	1 MHz	-	IEC 60250	3.0
Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	20
Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	85
Volume resistivity	-	Ohm-m	IEC 60093	1.0E14
Surface resistivity	-	Ohm	IEC 60093	1.0E16
Electrical strength	-	kV/mm	IEC 60243-1	35
Comparative tracking index CTI	Solution A	Rating	IEC 60112	225
Other properties (23 °C)				
Water absorption	73 °F; immersion to saturation; 0.125 in	%	ISO 62	0.7
Water absorption	73 °F, 50% RH in air to saturation, 0.125-in	%	ISO 62	0.2
Density	-	kg/m ³	ASTM D792	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