Bayblend DP T50

Standard grades / Non reinforced General purpose injection molding grade; Vicat/B 120 temperature = 118 °C; excellent flow.

ISO Shortname

	Property	Test Condition	Unit	Standard	Value
Rheological properties					
	Spiral flow length	260 °C; 2 x 8.7 mm	mm	Bayer test	495
C	Melt volume-flow rate	260 °C; 5 kg	cm³/(10 min)	ISO 1133	25
	Molding shrinkage, parallel	150x105x3; 260 °C / MT 80 °C; 500 bar	%	acc. ISO 2577	0.55 - 0.75
	Molding shrinkage, normal	150x105x3; 260 °C / MT 80 °C; 500 bar	%	acc. ISO 2577	0.55 - 0.75
Mechanical properties (23 °C/50 % r. h.)					
C	Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2400
C	Yield stress	50 mm/min	MPa	ISO 527-1,-2	50
C	Yield strain	50 mm/min	%	ISO 527-1,-2	3.8
	Stress at break	50 mm/min	MPa	ISO 527-1,-2	42
	Strain at break	50 mm/min	%	acc. ISO 527-1,-2	> 50
	Izod impact strength	23 °C	kJ/m²	ISO 180/U	N
	Izod impact strength	-30 °C	kJ/m²	ISO 180/U	N
	Izod notched impact strength	23 °C	kJ/m²	ISO 180/A	40
	Izod notched impact strength	-30 °C	kJ/m²	ISO 180/A	20
Thermal properties					
C	Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	97
C	Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	116
C	Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	116
	Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	118
C	Coefficient of linear thermal expansion, parallel	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	0.8
C	Coefficient of linear thermal expansion, transverse	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	0.85
C	Burning behavior UL 94 [UL recognition]	0.9 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	32
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	250
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 % RH	%	ISO 62	0.2
C	Density		kg/m³	ISO 1183	1120
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.