



Bayblend FR 2000

FR grades / Non reinforced

Injection molding grade; easy-flow grade; Vicat/B 120 temperature = 95 °C; UL-listing 94 V-0 (1.5 mm); antimony-, chlorine- and bromine-free flame retardant; glow wire test: 960 °C (2.0 mm); optimized processability; good light stability.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Spiral flow length	0.100 in, 490 °F melt temperature	in	Bayer test	30
Melt mass-flow rate	240 °C; 5 kg	g/(10 min)	ASTM D 1238	26
Molding shrinkage, parallel	500 bar	in/in	ASTM D 955	0.005-0.007
Molding shrinkage, normal	500 bar	in/in	ASTM D 955	0.005-0.007
Mechanical properties (23 °C/50 % r. h.)				
Tensile modulus	1 mm/min	lb/in ²	ASTM D 638	392000
Tensile stress at yield	73 °F, 0.2 in/min	lb/in ²	ASTM D 638	8700
Tensile elongation at yield	73 °F, 0.2 in/min	%	ASTM D 638	4
Tensile stress at break	73 °F, 0.2 in/min	lb/in ²	ASTM D 638	6500
Tensile elongation at break	73 °F, 0.2 in/min	%	ASTM D 638	> 50
Unnotched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D 4812	no break
Izod notched impact strength	73 °F, 0.125 in	ft-lb/in	ASTM D 256	8
Flexural modulus	-	lb/in ²	ASTM D 790	390000
Flexural stress at 5 % strain	-	lb/in ²	ASTM D 790	13800
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.250 in	°F	ASTM D 648	180
Vicat softening temperature	Rate B; 5 kg; 120 °C/h	°F	ASTM D 1525	203
Coefficient of linear thermal expansion, flow/cross-flow		in/in/°F	ISO 11359-1,-2	4.3E-5
UL94 Flame Class 5V [UL recognition]	Thickness tested: 2.0 mm	Class	UL 94	5VB
UL94 Flame Class 5V [UL recognition]	Thickness tested: 3.0 mm	Class	UL 94	5VA
Relative temperature index (Electric strength)	Thickness tested: 1.5 mm	°C	UL 746B	90
Relative temperature index (Tensile impact strength)	Thickness tested: 1.5 mm	°C	UL 746B	75
Relative temperature index (Tensile strength)	Thickness tested: 1.5 mm	°C	UL 746B	85
Electrical properties (23 °C/50 % r. h.)				
Relative permittivity	100 Hz	-	IEC 60250	3.2
Relative permittivity	1 MHz	-	IEC 60250	3.1
Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	50
Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	70
Volume resistivity		Ohm·m	IEC 60093	1.0 E14
Surface resistivity		Ohm	IEC 60093	1.0 E16
Dielectric strength		kV/mm	IEC 60243-1	30
Comparative tracking index CTI	Solution A	Rating	IEC 60112	400
Other properties (23 °C)				
Water absorption	73 °F; immersion to saturation; 0.125 in	%	ISO 62	0.5
Water absorption	73 °F, 50% RH in air to saturation, 0.125-in	%	ISO 62	0.2
Density		kg/m ³	ASTM D 792	1180
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