



Bayblend KU 1-1446

General purpose grades / Standard

Developmental product
; grade with improved low-temperature impact strength and petrol resistance for automotive parts; in version BBS904 suitable for extrusion/extrusion blow molding and electroplating applications; Vicat/B 120 temperature = 120 °C.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Melt flow rate	260 °C; 5 kg	g/(10 min)	ASTM D 1238	5
Molding shrinkage, parallel	500 bar	in/in	ASTM D 955	0.0065-0.0085
Molding shrinkage, normal	500 bar	in/in	ASTM D 955	0.0065-0.0085
Mechanical properties (23 °C/50 % r.h.)				
Tensile modulus	1 mm/min	lb/in ²	ASTM D 638	261000
Tensile stress at yield	73 °F, 0.2 in/min	lb/in ²	ASTM D 638	6525
Tensile elongation at yield	73 °F, 0.2 in/min	%	ASTM D 638	4.5
Tensile stress at break	73 °F, 0.2 in/min	lb/in ²	ASTM D 638	5800
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
Unnotched impact strength	-40 °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	11
Izod notched impact strength	-40 °F, 0.125 in	ft-lb/in	ASTM D 256	8
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.125 in	°F	ASTM D 648	230
Deflection temperature under load, Unannealed	66 psi; 0.125 in	°F	ASTM D 648	246
Vicat softening temperature	Rate B; 5 kg; 120 °C/h	°F	ASTM D 1525	248
UL94 Flame Class	Thickness tested: 1.5 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	25
Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	85
Volume resistivity		Ohm-m	IEC 60112	1.0 E14
Surface resistivity		Ohm	IEC 60093	1.0 E16
Dielectric strength		kV/mm	IEC 60243-1	35
Comparative tracking index CTI	Solution A	Rating	IEC 60112	200
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 D 792	1110
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

