



Bayblend R-FR 610

Non-reinforced recyclate grades / FR grades

Flame retardant recyclate grade; Vicat/B 120 temperature > 100 °C; UL-listing 94 V-0 (1.5 mm); not all colors available.

ISO Shortname

Property	Test Condition	Unit	Standard	Value
Rheological properties				
Melt flow rate	240 °C; 5 kg	g/(10 min)	ASTM D 1238	20
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	377000
Tensile stress at yield		lb/in ²	ASTM D 638	8000
Tensile elongation at yield		%	ASTM D 638	4
Tensile stress at break		lb/in ²	ASTM D 638	6500
Tensile elongation at break		%	ASTM D 638	30
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	9
Flexural modulus	-	lb/in ²	ASTM D 790	380000
Flexural stress at 5 % strain		lb/in ²	ASTM D 790	13500
Thermal properties				
Deflection temperature under load, Unannealed	264 psi; 0.125 in	°F	ASTM D 648	194
Vicat softening temperature	Rate B; 5 kg; 120 °C/h	°F	ASTM D 1525	> 212
UL94 Flame Class 5V [UL listed]	Thickness tested: 3.0 mm	Class	UL 94	5VA
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	30
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	30
Comparative tracking index CTI	Solution A	Rating	IEC 60112	300
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

