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/in²	ASTM D 638	377000
	Tensile stress at yield		lb/in²	ASTM D 638	8000
	Tensile elongation at yield		%	ASTM D 638	4
	Tensile stress at break		lb/in²	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/in²	ASTM D 790	380000
	Flexural stress at 5 % strain		lb/in²	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/m³	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