Bayblend® FR3010

Polycarbonate + ABS

Product Description:

(PC+ABS) blend; unreinforced; flame-retardant; injection molding grade; increased heat resistance; Vicat/B 120 temperature = 110 °C; UL recognition 94 V-0 (1.5 mm); glow wire test (GWFI): 960 °C (2.0 mm); improved chemical resistance and stress cracking behavior; successor to FR2010.

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General

Material Status	Commercial: Active	
Additive	Flame Retardant	
Features	Chemical Resistant	High ESCR (Stress Crack Resist.)
	Flame Retardant	Medium Heat Resistance
RoHS Compliance	RoHS Compliant	
Processing Method	Injection Molding	

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.18	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (240°C/5.0 kg)	0.915	in³/10min	ISO 1133
Molding Shrinkage [3]			ISO 2577
Across Flow : 464°F, 0.118 in	0.50 to 0.70	%	
Flow : 464°F, 0.118 in	0.50 to 0.70	%	
Water Absorption			ISO 62
Saturation, 73°F	0.5	%	
Equilibrium, 73°F, 50% RH	0.2	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	392000	psi	ISO 527-2/1
Tensile Stress			ISO 527-2/50
Yield, 73°F	8700	psi	
Break, 73°F	7250	psi	
Tensile Strain			ISO 527-2/50
Yield, 73°F	4	%	
Break, 73°F	> 50	%	
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength			ISO 180/A
-22°F	4.8	ft·lb/in²	
73°F	17	ft·lb/in²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
66 psi, Unannealed	212	°F	ISO 75-2/B
264 psi, Unannealed	194	°F	ISO 75-2/A
Vicat Softening Temperature			
--	226	°F	ISO 306/B50
--	230	°F	ISO 306/B120
CLTE			ISO 11359-2
Flow : 73 to 131°F	4.20E-05	in/in/°F	
Transverse : 73 to 131°F	4.40E-05	in/in/°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.00E+16	ohms	IEC 60093
Volume Resistivity (73°F)	1.00E+16	ohms·cm	IEC 60093
Electric Strength (73°F, 0.0394 in)	890	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
73°F, 100 Hz	3.2		
73°F, 1 MHz	3.1		
Dissipation Factor			IEC 60250
73°F, 100 Hz	5.00E-03		
73°F, 1 MHz	7.00E-03		
Comparative Tracking Index (Solution A)	350	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.06 in	V-0		
0.08 in	5VB		
0.12 in	5VA		
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Viscosity [4] (500°F)	245	Pa·s	ISO 11443-A

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector.

[3] 150x105x3 mm, 80°C MT

[4] 1000/s

Revision History

Added to Prospector: May 2007

Last Updated: 8/27/2015