



THE GOLD STANDARD IN PLASTICS
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Bayblend® FR 3010

Bayer MaterialScience LLC - *Acrylonitrile Butadiene Styrene + PC*

Units English

Action

[Legend \(Open\)](#)



General Information

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); antimony-, chlorine- and bromine-free flame retardant; glow wire test (GWI): 960 °C (2.0 mm); improved chemical resistance and stress cracking behavior; successor to FR2010.

General

Material Status	● Commercial: Active
Availability	● North America
Additive	● Flame Retardant
Features	<ul style="list-style-type: none"> ● Amorphous ● Bromine Free ● Chlorine Free ● Flame Retardant ● Good Chemical Resistance ● High ESCR (Stress Crack Resist.) ● High Heat Resistance
Agency Ratings	<ul style="list-style-type: none"> ● EU 2000/53/EC ● EU 2002/96/EC ● EU 2003/11/EC
RoHS Compliance	● RoHS Compliant
Forms	● Pellets
Processing Method	● Injection Molding

ASTM & ISO Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density	1.18	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (240°C/5.0 kg)	0.915	in ³ /10min	ISO 1133
Molding Shrinkage ²			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 (Saturation, 73°F)	0.50	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical			
Tensile Modulus (73°F)	392000	psi	ISO 527-2/1
Tensile Stress (Yield, 73°F)	8700	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	7250	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.0	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	> 50	%	ISO 527-2/50
Impact			
Notched Izod Impact Strength			ISO 180/A
-22°F	4.8	ft-lb/in ²	
73°F	17	ft-lb/in ²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180
Thermal			
Heat Deflection Temperature (66 psi, Unannealed)	194	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	212	°F	ISO 75-2/A
Vicat Softening Temperature			
--	226	°F	ISO 306/B50
--	230	°F	ISO 306/B120
CLTE - Flow (73 to 131°F)	0.000042	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	0.000044	in/in/°F	ISO 11359-2
Electrical			
Surface Resistivity	1.0E+16	ohm	IEC 60093
Volume Resistivity (73°F)	1.0E+16	ohm-cm	IEC 60093
Electric Strength (73°F, 0.0394 in)	890	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
73°F, 100 Hz	3.20		
73°F, 1 MHz	3.10		
Dissipation Factor			IEC 60250
73°F, 100 Hz	0.0050		
73°F, 1 MHz	0.0070		
Comparative Tracking Index (Solution A)	350	V	IEC 60112
Flammability			
Flame Rating			UL 94
0.0591 in	V-0		

0.118 in	5VA
0.0787 in	5VB
Fill Analysis	Nominal Value Unit Test Method
Melt Viscosity (500°F, 1000 sec ⁻¹)	245 Pa·s ISO 11443-A

Notes

¹ Typical properties: these are not to be construed as specifications.

² 150x105x3 mm, 80°C MT

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