

Bayblend® FR3013

 Covestro - Polycarbonates - *Polycarbonate + ABS*
General Information
Product Description

(PC+ABS)-Blend; flame retardant; impact modified; easy flowing; Vicat/B 120 temperature = 95°C; for: information technology

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Flame Retardant	• Impact Modifier	
Features	• Flame Retardant	• Good Flow	• Impact Modified
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+ABS-FR(40)		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.19	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (240°C/5.0 kg)	26	cm ³ /10min	ISO 1133
Molding Shrinkage - Across Flow			
0.0787 in ²	0.40 to 0.60	%	ISO 294-4
0.118 in ³	0.40 to 0.60	%	ISO 2577
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	384000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	8850	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	6380	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.0	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	30	%	ISO 527-2/50
Flexural Modulus ⁴ (73°F)	377000	psi	ISO 178
Flexural Stress ⁴ (73°F)	13500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	18	ft·lb/in ²	ISO 179/1eA
Notched Izod Impact Strength			ISO 180/A
-22°F	3.8	ft·lb/in ²	
73°F	16	ft·lb/in ²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	187	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	172	°F	ISO 75-2/A
Vicat Softening Temperature			
--	203	°F	ISO 306/B120
--	192	°F	ISO 306/B50
CLTE - Flow (73 to 131°F)	4.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	4.2E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.0E+17	ohms	IEC 60093
Volume Resistivity (73°F)	2.0E+18	ohms·cm	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	• V-0		UL 94
	• 5VB		
Oxygen Index ⁵	31	%	ISO 4589-2



Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity ⁶ (464°F)	155	Pa·s	ISO 11443-A

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Dry Air Dryer	176	°F
Drying Time - Dry Air Dryer	4.0	hr
Suggested Max Moisture	< 0.020	%
Suggested Shot Size	30 to 70	%
Rear Temperature	428 to 446	°F
Middle Temperature	437 to 455	°F
Front Temperature	446 to 464	°F
Nozzle Temperature	491 to 509	°F
Processing (Melt) Temp	464 to 518	°F
Mold Temperature	140 to 176	°F
Back Pressure	725 to 2180	psi
Vent Depth	9.8E-4 to 3.0E-3	in

Injection Notes

Standard Melt Temperature: 260°C
Peripheral Screw Speed: 0.05 - 0.2 m/s
Hold Pressure (% of Injection Pressure): 50 - 75%

Notes

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

² 60x60x2mm

³ 150x105x3mm

⁴ 0.079 in/min

⁵ Procedure A

⁶ 1000s-1

