

Bayblend® FR3000 BBS300

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

(PC+ABS)-Blend; easy flowing; Vicat/B 120 temperature = 103°C; UL recognition 94 V-0 at 1.5 mm; no juicing; good light stability

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.18	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (240°C/5.0 kg)	20	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 2577
Across Flow	0.40 to 0.60	%	
Flow	0.40 to 0.60	%	
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	384000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	9280	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	3.9	%	ISO 527-2/50
Nominal Tensile Strain at Break (73°F)	40	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	14	ft·lb/in ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	203	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	185	°F	ISO 75-2/A
Vicat Softening Temperature	217	°F	ISO 306/B120
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity (73°F)	1.0E+16	ohms·cm	IEC 60093
Relative Permittivity			IEC 60250
73°F, 100 Hz	3.00		
73°F, 1 MHz	2.90		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.08 in	5VB		
Oxygen Index ²	34	%	ISO 4589-2
Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity ³ (464°F)	150	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 194 °F
Back Pressure	725 to 2180 psi
Vent Depth	9.8E-4 to 3.0E-3 in

Injection Notes

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

Notes

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

² Procedure A

³ 1000s-1

