Bayblend® FR3005 BBS310

Covestro - Polycarbonates - *Polycarbonate + ABS*

General Information

Product Description			
(PC+ABS)-Blend; flame retardant; Vicat/B 120 temperature = 89°C; improved chemical resistance; UL recognition 94 V-0 at 1.5 mm			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Chemical Resistant	• Flame Retardant	
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+ABS-FR(40)		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density (73°F)	1.19	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (240°C/5.0 kg)	30	cm³/10min	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	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	384000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	8700	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	6530	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	3.6	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	39	%	ISO 527-2/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength (73°F)	6.7	ft·lb/in²	ISO 180/A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	181	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	165	°F	ISO 75-2/A
Vicat Softening Temperature	192	°F	ISO 306/B120
CLTE - Flow (73 to 131°F)	4.2E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	4.4E-5	in/in/°F	ISO 11359-2
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	• V-0 • 5VB		UL 94

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] 150x105x3mm,, MT 80°C