

Bayblend® FR3025 R35 RE

Covestro - Polycarbonates - *Polycarbonate + ABS*

General Information

Product Description

(PC+ABS)-Blend; flame retardant; mineral filled ; containing 35% post-consumer PC recyclate; Vicat/B 120 temperature = 102°C; UL recognition 94 V-0 at 1.2 mm; low warpage; improved stiffness and surface quality; for notebooks and thinwall applications

Partially bio-circular grade / Attributed via mass balance (according to ISCC PLUS Standard).

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Mineral		
Additive	• Flame Retardant		
Recycled Content	• Post-Consumer (PCR), 35%		
Features	• Flame Retardant	• Low Warpage	
Uses	• Thin-walled Parts		
Agency Ratings	• ISCC PLUS		
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+ABS-(TD11+QD15) FR(40)		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.40	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	27	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow : 0.0787 in	0.30	%	
Flow : 0.0787 in	0.30	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	899000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	8560	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	7540	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	2.7	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	5.4	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.9	ft·lb/in ²	
73°F	2.9	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in ²	
73°F	24	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/A
-22°F	2.4	ft·lb/in ²	
73°F	2.9	ft·lb/in ²	
Unnotched Izod Impact Strength			ISO 180
-22°F	14	ft·lb/in ²	
73°F	19	ft·lb/in ²	
Multi-Axial Instrumented Impact Energy			ISO 6603-2
-22°F	1.84	ft·lb	
73°F	9.59	ft·lb	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2



-22°F	247 lbf	
73°F	585 lbf	
Thermal	Nominal Value	Unit Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	205 °F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	194 °F	ISO 75-2/A
Vicat Softening Temperature		
--	216 °F	ISO 306/B120
--	212 °F	ISO 306/B50
Flammability	Nominal Value	Unit Test Method
Flame Rating (0.05 in)	V-0	UL 94
Fill Analysis	Nominal Value	Unit Test Method
Melt Viscosity ³ (500°F)	227 Pa·s	ISO 11443-A

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Dry Air Dryer	185 °F	
Drying Time - Dry Air Dryer	2.0 to 4.0 hr	
Suggested Max Moisture	< 0.025 %	
Suggested Shot Size	30 to 70 %	
Rear Temperature	464 to 500 °F	
Middle Temperature	482 to 536 °F	
Front Temperature	518 to 572 °F	
Nozzle Temperature	518 to 572 °F	
Processing (Melt) Temp	518 to 572 °F	
Mold Temperature	149 to 212 °F	
Back Pressure	725 to 1450 psi	
Vent Depth	7.9E-4 to 1.6E-3 in	
Injection Notes		
Hold Pressure (% of Injection Pressure): 50-75%		
Standard Melt Temperature: 290°C		
Peripheral Screw Speed: 0.1-0.3 m/s		

Notes

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

² 60x60x2mm

³ 1000s-1

