

**Bayblend® T50 PG**

 Covestro - Polycarbonates - *Polycarbonate + ABS*

## General Information

**Product Description**

formerly Bayblend® TP2350; ABS+PC-Blend; Vicat/B 120 temperature = 113°C; for electroplating applications

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Platable
ISO Designation	• ABS+PC

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.10	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	12	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage <sup>2</sup>			ISO 2577
Across Flow : 500°F, 0.118 in	0.55 to 0.75	%	
Flow : 500°F, 0.118 in	0.55 to 0.75	%	
Water Absorption (Saturation, 73°F)	0.70	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	276000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	6820	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	5800	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.3	%	ISO 527-2/50
Nominal Tensile Strain at Break (73°F)	> 50	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	24	ft·lb/in <sup>2</sup>	
73°F	24	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/A
-22°F	21	ft·lb/in <sup>2</sup>	
73°F	21	ft·lb/in <sup>2</sup>	
Unnotched Izod Impact Strength			ISO 180
-22°F	No Break		
73°F	No Break		
Multi-Axial Instrumented Impact Energy			ISO 6603-2
-22°F	33.2	ft·lb	
73°F	29.5	ft·lb	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2
-22°F	989	lbf	
73°F	787	lbf	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	237	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	199	°F	ISO 75-2/A
Vicat Softening Temperature			



--	235 °F	ISO 306/B120
--	232 °F	ISO 306/B50
CLTE - Flow (73 to 131°F)	5.0E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.0E-5 in/in/°F	ISO 11359-2
<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+16 ohms	IEC 60093
Volume Resistivity (73°F)	1.0E+18 ohms·cm	IEC 60093
Electric Strength (73°F, 0.0394 in)	890 V/mil	IEC 60243-1
Relative Permittivity		IEC 60250
73°F, 100 Hz	2.50	
73°F, 1 MHz	2.90	
Dissipation Factor		IEC 60250
73°F, 100 Hz	3.0E-3	
73°F, 1 MHz	0.011	
Comparative Tracking Index (Solution A)	300 V	IEC 60112
<b>Fill Analysis</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Melt Viscosity <sup>3</sup> (500°F)	200 Pa·s	ISO 11443-A

### Processing Information

<b>Injection</b>	<b>Nominal Value Unit</b>
Drying Temperature - Dry Air Dryer	203 to 230 °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	158 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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 150x105x3mm, MT 80°C

<sup>3</sup> 1000s-1

