

# Bayblend® T65 XF

### Covestro - Polycarbonates - Polycarbonate + ABS

Thursday, January 23, 2025

General Information				
Product Description				
(PC+ABS)-Blend; Vicat/B 120 tem	perature = 120°C; improved flow compare	d with T65		
General				
Material Status	Commercial: Active			
Regional Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America	
Features	Good Flow			
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>			
Automotive Specifications	<ul><li>FORD WSS-M4D684-B1</li><li>FORD WSS-M4D924-B1</li><li>GM GMW15581P-ABS+PC-T3</li></ul>	<ul> <li>GM GMW15581P-ABS+PC-T2 Color: 901510 Black</li> <li>GM GMW15581P-ABS+PC-T5</li> <li>GM GMW15581P-ABS+PC-T5 Color: 901510 Black</li> </ul>	<ul> <li>GM QK 000195 Type B Color: 901510 Black</li> <li>GM QK 002412 Color: 901510 Black</li> </ul>	
ISO Shortname	• PC+ABS			

	ASTM & ISO Properties 1				
Physical	Typical Value	(English)	Typical Value	(SI)	Test Method
Density (73°F (23°C))	1.13	g/cm³	1.13	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	18	cm³/10min	18	cm³/10min	ISO 1133
Molding Shrinkage <sup>2</sup>					ISO 2577
Across Flow : 500°F (260°C), 0.118 in (3.00 mm)	0.50 to 0.70	%	0.50 to 0.70	%	
Flow: 500°F (260°C), 0.118 in (3.00 mm)	0.50 to 0.70	%	0.50 to 0.70	%	
Water Absorption					ISO 62
Saturation, 73°F (23°C)	0.70	%	0.70	%	
Equilibrium, 73°F (23°C), 50% RH	0.20	%	0.20	%	
Mechanical	Typical Value	(English)	Typical Value	(SI)	Test Method
Tensile Modulus (73°F (23°C))	341000	psi	2350	MPa	ISO 527-1/1
Tensile Stress					ISO 527-2/50
Yield, 73°F (23°C)	7830	psi	54.0	MPa	
Break, 73°F (23°C)	6820	psi	47.0	MPa	
Tensile Strain					ISO 527-2/50
Yield, 73°F (23°C)	4.4	%	4.4	%	
Break, 73°F (23°C)	> 50	%	> 50	%	
Flexural Modulus <sup>3</sup> (73°F (23°C))	341000	psi	2350	MPa	ISO 178
Flexural Stress <sup>3</sup>					ISO 178
3.5% Strain, 73°F (23°C)	10600	psi	73.0	MPa	
73°F (23°C)	12200	psi	84.0	MPa	

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Suggested Shot Size

Rear Temperature

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Impact	Typical Value	(English)	Typical Value	(SI)	Test Method
Charpy Notched Impact Strength					ISO 179/1eA
-22°F (-30°C)	17	ft·lb/in²	36	kJ/m²	
73°F (23°C)	24	ft·lb/in²	50	kJ/m²	
Notched Izod Impact Strength					ISO 180/A
-22°F (-30°C)	17	ft·lb/in²	35	kJ/m²	
73°F (23°C)	23	ft·lb/in²	48	kJ/m²	
Unnotched Izod Impact Strength					ISO 180
-22°F (-30°C)	No Break		No Break		
73°F (23°C)	No Break		No Break		
Thermal	Typical Value	(English)	Typical Value	(SI)	Test Method
Deflection Temperature Under Load					
66 psi (0.45 MPa), Unannealed	252	°F	122	°C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	216	°F	102	°C	ISO 75-2/A
Vicat Softening Temperature					
	248	°F	120	°C	ISO 306/B120
	244	°F	118	°C	ISO 306/B50
CLTE					ISO 11359-2
Flow: 73 to 131°F (23 to 55°C)	4.4E-5	in/in/°F	8.0E-5	cm/cm/°C	
Transverse: 73 to 131°F (23 to 55°C)	4.7E-5	in/in/°F	8.5E-5	cm/cm/°C	
Electrical	Typical Value	(English)	Typical Value	(SI)	Test Method
Surface Resistivity	1.0E+16	ohms	1.0E+16	ohms	IEC 60093
Volume Resistivity (73°F (23°C))	1.0E+16	ohms·cm	1.0E+16	ohms·cm	IEC 60093
Electric Strength					IEC 60243-1
73°F (23°C), 0.0394 in (1.00 mm)	890	V/mil	35	kV/mm	
Relative Permittivity					IEC 60250
73°F (23°C), 100 Hz	3.10		3.10		
73°F (23°C), 1 MHz	3.00		3.00		
Dissipation Factor					IEC 60250
73°F (23°C), 100 Hz	3.0E-3		3.0E-3		
73°F (23°C), 1 MHz	8.5E-3		8.5E-3		
Comparative Tracking Index (Solution A)	250	V	250	V	IEC 60112
Flammability	Typical Value	(English)	Typical Value	(SI)	Test Method
Flame Rating (0.03 in (0.9 mm))	HB		НВ	•	UL 94
Oxygen Index <sup>4</sup>	24	%	24	%	ISO 4589-2
Fill Analysis	Typical Value		Typical Value		Test Method
Melt Viscosity <sup>5</sup> (500°F (260°C))		Pa·s		Pa·s	ISO 11443-A
Wiele Viscosity (500 i (200 G))	200		200		100 11440-71
	Processi	ng Informatio	on .		
Injection	Typical Value		Typical Value	(SI)	
Drying Temperature - Dry Air Dryer	203 to 230		95 to 110		
Drying Time - Dry Air Dryer	4.0		4.0	hr	
Suggested Max Moisture	< 0.020		< 0.020		
	3.020	*	3.320	•	

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30 to 70 %

220 to 230 °C

30 to 70 %

428 to 446 °F

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Injection	Typical Value	(English)	Typical Value	(SI)
Middle Temperature	437 to 455	°F	225 to 235	°C
Front Temperature	446 to 464	°F	230 to 240	°C
Nozzle Temperature	491 to 509	°F	255 to 265	°C
Processing (Melt) Temp	464 to 518	°F	240 to 270	°C
Mold Temperature	158 to 194	°F	70 to 90	°C
Back Pressure	725 to 2180	psi	5.00 to 15.0	MPa
Vent Depth	9.8E-4 to 3.0E-3	in	0.025 to 0.075	mm

#### **Injection Notes**

Peripheral Screw Speed: 0.05 - 0.2 m/s Standard Melt Temperature: 260°C

Hold Pressure (% of Injection Pressure): 50 - 75%

#### **Notes**

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

<sup>2</sup> 150x105x3mm,, MT 80°C

<sup>3</sup> 0.079 in/min (2.0 mm/min)

<sup>4</sup> Procedure A

<sup>5</sup> 1000s-1

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