

## Bayblend® T85 XF

Covestro - Polycarbonates - *Polycarbonate + ABS*

### General Information

#### Product Description

(PC+ABS)-Blend; Vicat/B 120 temperature = 130 °C; improved flow compared with T85

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Good Flow		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• FORD WSA-M4D688-A1	• GM GMP.ABS+PC.002	• GM GMW15581P-ABS+PC-T6
	• FORD WSA-M4D688-A2	• GM GMW15581P-ABS+PC-T3	Color: 901510 Black
	• FORD WSS-M4D585-B	• GM GMW15581P-ABS+PC-T3	• GM QK 000188 Type B Color:
	• FORD WSS-M4D585-C1	Color: 901510 Black	901510 Black
		• GM GMW15581P-ABS+PC-T6	• GM QK 002413 Color: 901510
			Black
ISO Designation	• PC+ABS		

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.14	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	19	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage <sup>2</sup>			ISO 2577
Across Flow : 500°F, 0.118 in	0.50 to 0.70	%	
Flow : 500°F, 0.118 in	0.50 to 0.70	%	
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)	334000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	7830	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	7250	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.7	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	> 50	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	18	ft·lb/in <sup>2</sup>	
73°F	24	ft·lb/in <sup>2</sup>	
Notched Izod Impact Strength			ISO 180/A
-22°F	17	ft·lb/in <sup>2</sup>	
73°F	23	ft·lb/in <sup>2</sup>	
Unnotched Izod Impact Strength			ISO 180
-22°F	No Break		
73°F	No Break		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	259	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ISO 75-2/A
Vicat Softening Temperature			
--	266	°F	ISO 306/B120
--	262	°F	ISO 306/B50
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
<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+16 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	3.10	
73°F, 1 MHz	3.00	
Dissipation Factor		IEC 60250
73°F, 100 Hz	2.0E-3	
73°F, 1 MHz	8.5E-3	
Comparative Tracking Index (Solution A)	225 V	IEC 60112
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Flame Rating (0.03 in)	HB	UL 94
Oxygen Index <sup>3</sup>	24 %	ISO 4589-2
<b>Fill Analysis</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Melt Viscosity <sup>4</sup> (500°F)	250 Pa·s	ISO 11443-A

### Processing Information

	Nominal Value	Unit
<b>Injection</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	446 to 464	°F
Middle Temperature	455 to 473	°F
Front Temperature	464 to 518	°F
Nozzle Temperature	509 to 527	°F
Processing (Melt) Temp	500 to 536	°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: 270°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> Procedure A
- <sup>4</sup> 1000s-1

