

## Bayblend® T85 X

Covestro - Polycarbonates - *Polycarbonate + ABS*

### General Information

#### Product Description

(PC+ABS) blend; General Purpose Grade; Vicat/B 120 temperature = 131 °C; good injection molding processing behaviour (easy flowing); excellent long-term ageing behaviour under humid conditions and painting performance; improved chemical resistance; low VOC emissions and odour

#### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Resin ID (ISO 1043)	• PC+ABS

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

Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	18	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage <sup>2</sup>			ISO 294-4
Across Flow : 0.0787 in	0.55 to 0.75	%	
Flow : 0.0787 in	0.55 to 0.75	%	
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-1/1
Tensile Stress (Yield)	8120	psi	ISO 527-2/50
Tensile Stress (Break)	7980	psi	ISO 527-2/50
Tensile Strain (Yield)	4.9	%	ISO 527-2/50
Nominal Tensile Strain at Break	100	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	22	ft·lb/in <sup>2</sup>	
73°F	29	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	22	ft·lb/in <sup>2</sup>	
73°F	27	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	41.3	ft·lb	
73°F	35.4	ft·lb	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2
-22°F	1210	lbf	
73°F	1010	lbf	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	261	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	223	°F	ISO 75-2/A



Vicat Softening Temperature		
--	268 °F	ISO 306/B120
--	264 °F	ISO 306/B50
CLTE - Flow (73 to 131°F)	3.9E-5 in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	3.9E-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 62631-3-2
Volume Resistivity	1.0E+16 ohms·m	IEC 62631-3-1
Electric Strength (0.0394 in)	1000 V/mil	IEC 60243-1
Relative Permittivity		IEC 60250
100 Hz	3.00	
1 MHz	3.00	
Dissipation Factor		IEC 60250
100 Hz	2.0E-3	
1 MHz	9.0E-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	Internal Method
<b>Fill Analysis</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Melt Viscosity (500°F, 1000 sec <sup>-1</sup> )	235 Pa·s	ISO 11443-A
<b>Additional Information</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Test Specimen Production		ISO 294
Inj. Molding - Injection Velocity	567 in/min	
Inj. Molding - Melt Temperature	536 °F	
Inj. Molding - Mold Temperature	176 °F	

### 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	0.010 %
Melt Temperature (Optimum)	536 °F
Mold Temperature	158 to 194 °F

### Notes

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

<sup>2</sup> 60×60×2 mm; 260°C; MT 80°C; 500 bar

