Bayblend® T90 XF

Covestro - Polycarbonates - *Polycarbonate + ABS*

General Information

Product Description			
(PC+ABS)-Blend; Vicat/B 120 temperature = 132°C; good balance of melt flow, impact strength and stress cracking resistance			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Flow	• Good Impact Resistance	• High ESCR (Stress Crack Resist.)
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+ABS		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.14	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	12	cm³/10min	ISO 1133
Molding Shrinkage [2]			ISO 294-4
Across Flow : 500°F, 0.0787 in	0.60 to 0.80	%	
Flow : 500°F, 0.0787 in	0.60 to 0.80	%	
Water Absorption (Saturation, 73°F)	0.60	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	319000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	7690	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	8120	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	5.1	%	ISO 527-2/50
Tensile Strain (Break, 73°F)	> 50	%	ISO 527-2/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact Strength			ISO 180/A
-22°F	21	ft·lb/in²	
73°F	26	ft·lb/in²	
Unnotched Izod Impact Strength			ISO 180
-22°F	No Break		
73°F	No Break		
Multi-Axial Instrumented Impact Energy			ISO 6603-2
-22°F	36.9	ft·lb	
73°F	32.5	ft·lb	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	264	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ISO 75-2/A
Vicat Softening Temperature			
--	270	°F	ISO 306/B120
--	266	°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)	4.2E-5	in/in/°F	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
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	3.00		
73°F, 1 MHz	2.90		
Dissipation Factor			IEC 60250
73°F, 100 Hz	2.5E-3		
73°F, 1 MHz	9.5E-3		
Comparative Tracking Index (Solution A)	200	V	IEC 60112

Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Viscosity [3] (500°F)	260	Pa·s	ISO 11443-A

Processing Information

Injection	**Nominal Value**	**Unit**
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

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

[2] 60x60x2mm, MT 80°C

[3] 1000s-1