Bayblend® T70 X

Covestro - Polycarbonates - *Polycarbonate + ABS*

General Information

Product Description			
(PC+ABS)-Blend; General Purpose Grade; Vicat/B 120 temperature = 124 °C; good injection molding processing behaviour (easy flowing); excellent long-term ageing behaviour under humid conditions; good painting performance; improved chemical resistance; low VOC emissions and odour			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • General Purpose	• Good Flow • Low Emissions	• Low Odor
Uses	• General Purpose		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation	• PC+ABS		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density (73°F)	1.13	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	18	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow : 500°F, 0.0787 in	0.55 to 0.75	%	
Flow : 500°F, 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 (73°F)	326000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	7690	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	7690	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.7	%	ISO 527-2/50
Nominal Tensile Strain at Break (73°F)	100	%	ISO 527-2/50
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	24	ft·lb/in²	
73°F	29	ft·lb/in²	
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/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	39.1	ft·lb	
73°F	35.4	ft·lb	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2
-22°F	1170	lbf	

73°F	967	lbf	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	257	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	217	°F	ISO 75-2/A
Vicat Softening Temperature			
--	255	°F	ISO 306/B120
--	252	°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
Electrical	**Nominal Value**	**Unit**	**Test Method**
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)	1000	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
73°F, 100 Hz	2.90		
73°F, 1 MHz	3.00		
Dissipation Factor			IEC 60250
73°F, 100 Hz	2.5E-3		
73°F, 1 MHz	9.0E-3		
Comparative Tracking Index (Solution A)	200	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.03 in, Internal Test)	HB		UL 94
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Viscosity (500°F, 1000 sec^-1)	210	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	0.010	%
Processing (Melt) Temp	518 to 554	°F
Mold Temperature	158 to 194	°F
Injection Notes		
Standard Melt Temperature: 280°C		

Notes

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