

Bayblend® W85 XB

 Covestro - Polycarbonates - *Polycarbonate + ASA*
General Information
Product Description

(PC+ASA) blend; high heat resistance; very easy-flowing; excellent colorability and weathering resistance

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• High Heat Resistance	• UV Resistant	
Resin ID (ISO 1043)	• PC+ASA		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	23	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 2577
Across Flow : 0.118 in	0.55 to 0.75	%	
Flow : 0.118 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 Strain (Yield)	4.9	%	ISO 527-2/50
Tensile Strain (Break)	> 50	%	ISO 527-2/50
Flexural Modulus ³	363000	psi	ISO 178
Flexural Stress ³	14100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	6.7	ft·lb/in ²	
73°F	26	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/A
-22°F	5.2	ft·lb/in ²	
73°F	24	ft·lb/in ²	
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	33.2	ft·lb	
Multi-Axial Instrumented Impact Peak Force			ISO 6603-2
-22°F	1280	lbf	
73°F	1060	lbf	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	253	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	223	°F	ISO 75-2/A
Vicat Softening Temperature			
--	264	°F	ISO 306/B120



--	261 °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
Surface Resistivity	1.0E+16 ohms	IEC 62631-3-2
Volume Resistivity	1.0E+16 ohms·cm	IEC 60093
Volume Resistivity	1.0E+14 ohms·m	IEC 62631-3-1
Comparative Tracking Index (Solution A)	175 V	IEC 60112
Flammability	Nominal Value Unit	Test Method
Flame Rating (0.03 in)	HB	Internal Method
Glow Wire Flammability Index (0.08 in)	1380 °F	IEC 60695-2-12
Fill Analysis	Nominal Value Unit	Test Method
Melt Viscosity (500°F, 1000 sec ⁻¹)	224 Pa·s	ISO 11443-A
Additional Information	Nominal Value Unit	Test Method
Test Specimen Production		ISO 294
Inj. Molding - Injection Velocity	567 in/min	
Inj. Molding - Melt Temperature	500 °F	
Inj. Molding - Mold Temperature	176 °F	

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 %
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
Melt Temperature (Optimum)	518 °F
Mold Temperature	158 to 194 °F
Back Pressure	725 to 2180 psi
Vent Depth	9.8E-4 to 3.0E-3 in
Holding Pressure - % of Inj. Pressure	50 to 75 %
Peripheral Screw Speed	2 to 8 in/sec

Notes

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

² 150×105×3 mm; 260°C; MT 80°C

³ 0.079 in/min

