

Bayblend® M850 XF

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

 (PC+ABS)-Blend; easy flowing; Vicat/B 120 temperature = 131°C; meet certain requirements of ISO Standard 10993-1; for further information please contact plastics@covestro.com
General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Good Flow		
Uses	• Medical/Healthcare Applications		
Agency Ratings	• ISO 10993-1	• USP Class VI	
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+ABS		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.14	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	25	cm ³ /10min	ISO 1133
Molding Shrinkage ²			ISO 2577
Across Flow : 500°F, 0.118 in	0.55 to 0.75	%	
Flow : 500°F, 0.118 in	0.55 to 0.75	%	
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)	363000	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	8990	psi	ISO 527-2/50
Tensile Stress (Break, 73°F)	7690	psi	ISO 527-2/50
Tensile Strain (Yield, 73°F)	4.9	%	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	7.1	ft·lb/in ²	
73°F	23	ft·lb/in ²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180
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)	228	°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
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+17	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	2.90		



73°F, 1 MHz	2.90	
Dissipation Factor		IEC 60250
73°F, 100 Hz	3.0E-3	
73°F, 1 MHz	9.0E-3	
Comparative Tracking Index (Solution A)	250 V	IEC 60112
Flammability	Nominal Value	Unit
Flame Rating (0.03 in, Internal Test)	HB	UL 94
Fill Analysis	Nominal Value	Unit
Melt Viscosity ³ (500°F)	210 Pa·s	ISO 11443-A

Processing Information

	Nominal Value	Unit
Injection		
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
Standard Melt Temperature: 270°C
Hold Pressure (% of Injection Pressure): 50 - 75%

Notes

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

² 150x105x3mm., MT 80°C

³ 1000s-1

