

**Bayblend® T88 GF-20**

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

Rubber modified (PC+SAN) blend; 20% glass fiber filled; Vicat/B 120 temperature = 130°C; optimized heat ageing- and UV-stability; very good flow; tensile modulus = 7200 MPa; good heat resistance

**General**

Material Status	• <b>Experimental: Active</b>		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Good Flow	• High Heat Resistance	
	• Heat Aging Resistant	• UV Resistant	
RoHS Compliance	• RoHS Compliant		
ISO Designation	• PC+SAN-I-GF20		

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.29	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	14	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage <sup>2</sup>			ISO 2577
Across Flow : 500°F, 0.118 in	0.30 to 0.50	%	
Flow : 500°F, 0.118 in	0.20 to 0.40	%	
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.04E+6	psi	ISO 527-1/1
Tensile Stress (Yield, 73°F)	17400	psi	ISO 527-2/5
Tensile Stress (Break, 73°F)	17400	psi	ISO 527-2/5
Tensile Strain (Yield, 73°F)	2.4	%	ISO 527-2/5
Tensile Strain (Break, 73°F)	2.4	%	ISO 527-2/5
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength			ISO 180/A
-22°F	3.8	ft·lb/in <sup>2</sup>	
73°F	3.8	ft·lb/in <sup>2</sup>	
Unnotched Izod Impact Strength			ISO 180
-22°F	18	ft·lb/in <sup>2</sup>	
73°F	18	ft·lb/in <sup>2</sup>	
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)	246	°F	ISO 75-2/A
Vicat Softening Temperature			
--	266	°F	ISO 306/B120
--	262	°F	ISO 306/B50
CLTE - Flow (73 to 131°F)	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	3.6E-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	3.30	
73°F, 1 MHz	3.20	
Dissipation Factor		IEC 60250
73°F, 100 Hz	2.5E-3	
73°F, 1 MHz	8.5E-3	
Comparative Tracking Index (Solution A)	150 V	IEC 60112
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>
Flame Rating (0.03 in)	HB	UL 94
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>
Melt Viscosity <sup>3</sup> (500°F)	205 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

Hold Pressure (% of Injection Pressure): 50 - 75%

Standard Melt Temperature: 270°C

Peripheral Screw Speed: 0.05 - 0.2 m/s

#### Notes

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

<sup>2</sup> 150x105x3mm., MT 80°C

<sup>3</sup> 1000s-1

