

## Covestro Bayblend® FR3050 PC/ABS Blend

Category : Polymer , Thermoplastic , ABS Polymer , Polycarbonate/ABS Alloy, Unreinforced , Polycarbonate (PC)

### Material Notes:

Main characteristics:• High toughness even at low temperatures• High dimensional accuracy and stability• Good paintability• Good flowability  
Grade characteristics:• Flame-retardant• Injection molding• High heat resistant• Improved chemical resistance and stress cracking behavior  
As of 1 September 2015, Bayer Material Science was separated from Bayer AG and officially adopted its new name – Covestro.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Covestro-Bayblend-FR3050-PCABS-Blend.php](http://www.lookpolymers.com/polymer_Covestro-Bayblend-FR3050-PCABS-Blend.php)

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in <sup>3</sup>	ISO 1183-1
Moisture Absorption at Equilibrium	0.20 %	0.20 %	ISO 62, 50% RH
Water Absorption at Saturation	0.50 %	0.50 %	ISO 62
Viscosity	480000 cP @Shear Rate 1000 1/s, Temperature 260 °C	480000 cP @Shear Rate 1000 1/s, Temperature 500 °F	melt viscosity; b.o. ISO 11443-A
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.00 mm	0.0050 - 0.0070 in/in @Thickness 0.118 in	150x105x3mm; b.o. ISO 2577
Linear Mold Shrinkage, Transverse	0.0050 - 0.0070 cm/cm @Thickness 3.00 mm	0.0050 - 0.0070 in/in @Thickness 0.118 in	150x105x3mm; b.o. ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	60.0 MPa	8700 psi	50 mm/min; ISO 527-1,-2
Tensile Strength, Yield	65.0 MPa	9430 psi	50 mm/min; ISO 527-1,-2
Elongation at Break	>= 50 %	>= 50 %	50 mm/min; b.o. ISO 527-1,-2
Elongation at Yield	5.0 %	5.0 %	50 mm/min; ISO 527-1,-2
Tensile Modulus	2.40 GPa	348 ksi	1 mm/min; ISO 527-1,-2
Izod Impact, Notched (ISO)	55.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	26.2 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 180-A
Izod Impact, Unnotched (ISO)	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	ISO 180-U

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	68.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	37.8 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ISO 11359-1,-2
	@Temperature 23.0 - 55.0 $^{\circ}\text{C}$	@Temperature 73.4 - 131 $^{\circ}\text{F}$	
CTE, linear, Transverse to Flow	68.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	37.8 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ISO 11359-1,-2
	@Temperature 23.0 - 55.0 $^{\circ}\text{C}$	@Temperature 73.4 - 131 $^{\circ}\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	126 $^{\circ}\text{C}$	259 $^{\circ}\text{F}$	ISO 75-1,-2
Deflection Temperature at 1.8 MPa (264 psi)	115 $^{\circ}\text{C}$	239 $^{\circ}\text{F}$	ISO 75-1,-2
Vicat Softening Point	134 $^{\circ}\text{C}$	273 $^{\circ}\text{F}$	50 $^{\circ}\text{C}/\text{h}$ ; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
	136 $^{\circ}\text{C}$	277 $^{\circ}\text{F}$	120 $^{\circ}\text{C}/\text{h}$ ; ISO 306
	@Load 5.10 kg	@Load 11.2 lb	
Flammability, UL94	V-1	V-1	
	@Thickness 1.00 mm	@Thickness 0.0394 in	
	V-0	V-0	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	5VB	5VB	UL 94-5V
	@Thickness 2.00 mm	@Thickness 0.0787 in	
	5VA	5VA	UL 94-5V
	@Thickness 3.00 mm	@Thickness 0.118 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+17 ohm-cm	1.00e+17 ohm-cm	IEC 60093
Surface Resistance	1.00e+17 ohm	1.00e+17 ohm	IEC 60093
Dielectric Constant	3.1	3.1	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.2	3.2	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	35.0 kV/mm	889 kV/in	IEC 60243-1
	@Thickness 1.00 mm	@Thickness 0.0394 in	

Electrical Properties	Metric	English	Comments
Dissipation Factor	@Frequency 100 Hz	@Frequency 100 Hz	IEC 60250
	0.0080	0.0080	
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	300 V	300 V	Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	260 °C	500 °F	Injection molding; ISO 294
Mold Temperature	80.0 °C	176 °F	Injection molding; ISO 294
Injection Velocity	240 mm/sec	9.45 in/sec	ISO 294

## Contact Songhan Plastic Technology Co.,Ltd.

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