

Covestro Bayblend® FR 90 Polycarbonate + ABS Blend, Flame-Retardant (discontinued **)

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

Material Notes:

Information provided by Bayer Corporation, Plastics DivisionAs of 1 September 2015, Bayer MaterialScience was separated from Bayer AG and has officially adopted its new name – Covestro. This product was discontinued prior to the separation.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Covestro-Bayblend-FR-90-Polycarbonate-ABS-Blend-Flame-Retardant-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.17 g/cc	0.0423 lb/in ³	ASTM D792
Linear Mold Shrinkage	0.0040 - 0.0060 cm/cm	0.0040 - 0.0060 in/in	ASTM D955
Spiral Flow	71.0 cm @Thickness 2.50 mm	28.0 in @Thickness 0.0984 in	at 254°C melt temp.

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	121	121	ASTM D785
Tensile Strength, Ultimate	45.0 MPa	6530 psi	ASTM D638
Tensile Strength, Yield	60.0 MPa	8700 psi	ASTM D638
Elongation at Break	70 %	70 %	ASTM D638
Elongation at Yield	4.0 %	4.0 %	ASTM D638
Tensile Modulus	2.80 GPa	406 ksi	ASTM D638
Flexural Yield Strength	100 MPa	14500 psi	at 5% strain; ASTM D790
Flexural Modulus	2.80 GPa	406 ksi	ASTM D790
Izod Impact, Notched	5.30 J/cm @Thickness 3.17 mm	9.93 ft-lb/in @Thickness 0.125 in	ASTM D256
Impact Test	57.0 J @Thickness 3.20 mm	42.0 ft-lb @Thickness 0.126 in	Instrumented Total Impact; 3.2 mm thick, 12.5 mm dart, 75 mm clamp, 6.7 m/s; ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear	77.0 µm/m-°C @Temperature 20.0 °C	42.8 µin/in-°F @Temperature 68.0 °F	ASTM D696

Thermal Properties (Temperature at 1.8 MPa (264 psi))	82.0 °C Metric	180 °F English	Comments
	@Thickness 6.35 mm	@Thickness 0.250 in	Comments: ASTM D648
Vicat Softening Point	91.0 °C	196 °F	Rate B/120; ASTM D1525
UL RTI, Electrical	85.0 °C @Thickness 1.57 mm	185 °F @Thickness 0.0618 in	
UL RTI, Mechanical with Impact	75.0 °C @Thickness 1.57 mm	167 °F @Thickness 0.0618 in	
UL RTI, Mechanical without Impact	80.0 °C @Thickness 1.57 mm	176 °F @Thickness 0.0618 in	
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	
	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	
Oxygen Index	30 %	30 %	ASTM D2836

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	IEC 112
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 93
Dielectric Constant	2.9 @Frequency 1e+6 Hz	2.9 @Frequency 1e+6 Hz	ASTM D150
	3.0 @Frequency 100 Hz	3.0 @Frequency 100 Hz	IEC 250
Dielectric Strength	29.9 kV/mm	759 kV/in	IEC 243
Dissipation Factor	0.0050 @Frequency 100 Hz	0.0050 @Frequency 100 Hz	IEC 250
	0.0070 @Frequency 1e+6 Hz	0.0070 @Frequency 1e+6 Hz	ASTM D150
Arc Resistance	60 - 120 sec @Thickness 3.00 mm	60 - 120 sec @Thickness 0.118 in	UL Rating PLC 6 (60-120 sec)
Comparative Tracking Index	300 V	300 V	IEC 112
	60 - 120 sec	60 - 120 sec	

Hot Wire Ignition, HWI Electrical Properties	Metric @Thickness 3.00 mm	English @Thickness 0.118 in	UL Rating PLC 1 (60-120 sec) Comments
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	UL Rating PLC 0 (>120 arcs)
High Voltage Arc-Tracking Rate, HVTR	>= 150 mm/min @Thickness 3.00 mm	>= 5.91 in/min @Thickness 0.118 in	UL Rating PLC 4 (>150 mm/min.)

Processing Properties	Metric	English	Comments
Melt Temperature	220 - 270 °C	428 - 518 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China