Bayblend® M301 FR

(PC+ABS) FR(40) Covestro Deutschland AG

Product Texts

- (PC ABS)-Blend
- Vicat/B 120 = 105°C
- suitable for use in electrical and electronic devices
- Manufactured according to GMP
- tested only according to ISO 10993-5 and ISO 10993-10 for contact with uncompromised skin only
- for questions regarding biocompatibility we ask for an email inquiry under plastics@covestro.com

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**25**	cm³/10min	ISO 1133
Temperature	**240**	°C	-
Load	**5**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.6**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2600**	MPa	ISO 527
[C] Yield stress	**60**	MPa	ISO 527
[C] Yield strain	**4**	%	ISO 527
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**35**	kJ/m²	ISO 180/1A

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**85**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**95**	°C	ISO 75-1/-2
Vicat softening temperature, B	**105**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**76**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**80**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
Thickness tested	**2.0**	mm	-
[C] Burning Behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**3.0**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.2**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.1**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**50**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**70**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**30**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.5**	%	Sim. to ISO 62
[C] Humidity absorption	**0.2**	%	Sim. to ISO 62
[C] Density	**1190**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**240**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294
Injection Molding, injection velocity	**240**	mm/s	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**240 - 270**	°C	-
Mold temperature	**60 - 90**	°C	-
Zone 1	**220 - 230**	°C	-
Zone 2	**225 - 235**	°C	-
Zone 3	**230 - 240**	°C	-
Nozzle temperature	**255 - 265**	°C	-
Back pressure	**5 - 15**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant, Halogen-free

Certifications
Medical Grade, Biocompatibility ISO 10993

Applications
Electrical and Electronical, Medical

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa