

Bayblend® M301 FR (PC+ABS) FR(40)

Covestro Deutschland AG

- (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

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	25	cm ³ /10min	ISO 1133
Temperature	240	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	60	MPa	ISO 527
Yield strain	4	%	ISO 527
Notched Impact Strength (Izod), 23 °C	35	kJ/m ²	ISO 180/1A
Impact Strength (Izod), 23 °C	no break	kJ/m ²	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	85	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	95	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	76	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Thickness tested	2.0	mm	-
Burning Behav. 5V at Thickness h	5VA	class	IEC 60695-11-20
Thickness tested	3.0	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.2	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
Dissipation Factor, 100Hz	50	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	70	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	30	kV/mm	IEC 60243-1

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1190	kg/m ³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
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

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

Certifications

Medical, Biocompatibility ISO 10993

Special Characteristics

Flame retardant, Halogen-free

Applications

Electrical and Electronical, Medical

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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