Bayblend® FR3009

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

Product Texts

- (PC ABS)-Blend
- flame retardant
- Vicat/B 120 temperature = 103 °C
- UL recognition 94 5VB at 1.8 mm
- successor to FR3000 BBS066
- Improved hydrolysis resistance

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	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2800**	MPa	ISO 527
[C] Yield stress	**60**	MPa	ISO 527
[C] Yield strain	**4**	%	ISO 527

[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
[C] Vicat softening temperature, B	**101**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**75**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**75**	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	-
[C] Burning Behav. 5V at thickness h	**5VB**	class	IEC 60695-11-20
Thickness tested	**1.8**	mm	-
[C] Oxygen index	**33**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.1**	-	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] Comparative tracking index	**300**	-	IEC 60112

[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	**1180**	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	**75 - 100**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**240 - 280**	°C	-
Mold temperature	**70 - 100**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Additives
Release agent

Special Characteristics
Flame retardant

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

Other text information

Injection molding
PREPROCESSING
Max. Water content: 0.02 %
Drying temperature: 75 - 100 °C
(depending on the grade 10°C below the Vicat VST/B120 temperature, but not higher as the recommended values).
Drying time:
Circulating air drying oven (50 % fresh air) 4-8 h
Fresh air dryer (high speed dryer) 2-4 h
Dry air dryer 2-4 h

PROCESSING
Melt temperature: 240-280 °C
Mold temperature: 70-100 °C

Use open nozzle.