BERGAMID® A70G45

PA66-GF45 — Avient Corporation

Product Texts

BERGAMID A70G45, PA66 reinforced
45% glass fibre, general-purpose injection molding grade

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	**11000 / 14500**	MPa	ISO 527
Stress at break	**170 / 220**	MPa	ISO 527
Strain at break	**3 / 2**	%	ISO 527
Charpy impact strength, +23°C	**100 / 90**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**80 / 80**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**23 / 17**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**18 / 15**	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**261 / ***	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**250 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**250 / ***	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**15 / ***	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**60 / ***	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.6 / ***	mm	-
Burning behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**5.6 / 3.7**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**1600 / 150**	E-4	IEC 62631-2-1
Volume resistivity	**1E10 / 1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	*** / 1E10**	Ohm	IEC 62631-3-2
Electric strength	**80 / 90**	kV/mm	IEC 60243-1
Comparative tracking index	**500 / -**	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	**4.7 / ***	%	Sim. to ISO 62
Humidity absorption	**1.5 / ***	%	Sim. to ISO 62
Density	**- / 1500**	kg/m³	ISO 1183

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	**135 / ***	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	**280**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Regional Availability
Europe

Other text information

Injection Molding

PREPROCESSING
Max. Water Content 0,1%
Pre-Drying: 80°C 4 Hours
PROCESSING
Melt Temperature 280-300°C
Mould Temperature 80-90°C