BERGAMID® A70/75/80

PA66 — Avient Corporation

Product Texts

BERGAMID A70/75/80, PA66 unreinforced
general-purpose injection molding grades
different viscosities available
UL Flame class: V-2

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**2.0 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**2.0 / ***	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	**1600 / 3200**	MPa	ISO 527
Yield stress	**60 / 80**	MPa	ISO 527
Yield strain	**25 / 4.5**	%	ISO 527
Nominal strain at break	**>50 / 22**	%	ISO 527
Charpy impact strength, +23°C	**N / N**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**N / N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**25 / 6**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**- / 4**	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	**80 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**220 / ***	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**85 / ***	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**82 / ***	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**V-2 / ***	class	IEC 60695-11-10
Thickness tested	**1.6 / ***	mm	-
Burning behav. at thickness h	**V-2 / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**5 / 3.6**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**2000 / 260**	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 / 120**	kV/mm	IEC 60243-1
Comparative tracking index	**- / 600**	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
Water absorption	**8.5 / ***	%	Sim. to ISO 62
Humidity absorption	**2.8 / ***	%	Sim. to ISO 62
Density	**- / 1130**	kg/m³	ISO 1183

Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	**150 / ***	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	**40**	°C	ISO 294

Characteristics

Processing
Injection Molding

Regional Availability
Europe

Delivery form
Pellets

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 40-80°C