BERGADUR® PB40GK30

PBT-GB30 — Avient Corporation

Product Texts

PBT, reinforced
30% glass bead
general-purpose injection molding grade

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**4000**	MPa	ISO 527
Stress at break	**57**	MPa	ISO 527
Strain at break	**6**	%	ISO 527
Tensile creep modulus, 1h	**3600**	MPa	ISO 899-1
Tensile creep modulus, 1000h	**2500**	MPa	ISO 899-1
Charpy impact strength, +23°C	**50**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**50**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**4**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**3**	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**224**	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**70**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**170**	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	**100**	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	**100**	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	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.8**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**180**	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	**25**	kV/mm	IEC 60243-1
Comparative tracking index	**500**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**0.35**	%	Sim. to ISO 62
Humidity absorption	**0.14**	%	Sim. to ISO 62
Density	**1530**	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	**230**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

Characteristics

Processing
Injection Molding

Regional Availability
Europe

Delivery form
Pellets

Other text information

Injection Molding

PREPROCESSING
Max. Water Content 0,04%
Pre-Drying: 120°C 2-4 Hours
PROCESSING
Melt Temperature 240-260°C
Mould Temperature 80°C