Durethan® BKV30H3.0EF 901510

PA6-GF30 Envalior

Product Texts

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF30

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.2 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.7 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**9400 / 5500**	MPa	ISO 527
[C] Stress at break	**170 / 100**	MPa	ISO 527
[C] Strain at break	**3 / 5.8**	%	ISO 527
[C] Charpy impact strength, +23°C	**65 / 80**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**55 / 55**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**11 / 15**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**- / 10**	kJ/m²	ISO 179/1eA
[C] Puncture - maximum force, +23°C	**750 / 1050**	N	ISO 6603-2
[C] Puncture - maximum force, -30°C	**650 / 750**	N	ISO 6603-2
[C] Puncture energy, +23°C	**1.7 / 4.6**	J	ISO 6603-2
[C] Puncture energy, -30°C	**1.3 / 1.4**	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**221 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**210 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**215 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**20 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**100 / ***	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.63 / 4.04**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**4.43 / 9.23**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**0.02 / 0.08**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**0.03 / 0.13**	E-4	IEC 62631-2-1
[C] Volume resistivity	**>1E13 / 7.7E10**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / 4.1E14**	Ohm	IEC 62631-3-2
[C] Electric strength	**31.6 / 29.1**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**7 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**2.1 / ***	%	Sim. to ISO 62
[C] Density	**1360 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**270**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**2 - 6**	h	-
Processing humidity	**≤0.12**	%	-
Melt temperature	**260 - 280**	°C	-
Mold temperature	**80 - 120**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
Heat stabilized or stable to heat

Delivery form
Pellets

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

Other text information

Injection molding
PREPROCESSING
Residual moisture content: 0.03 - 0.12%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING
Melt temperature (Tmin - Tmax): 260 - 280 °C

Mold temperature: 80 - 120 °C