Durethan® BKV30XTS3 000000

PA6-GF30 Envalior

Product Texts

Injection Molding, 30% Glass Reinforced, Heat Stabilized

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	**10100 / 5500**	MPa	ISO 527
[C] Stress at break	**185 / 80**	MPa	ISO 527
[C] Strain at break	**3.5 / 5**	%	ISO 527
Flexural modulus, 23°C	**9300 / 5500**	MPa	ISO 178
[C] Charpy impact strength, +23°C	**80 / 90**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**60 / 60**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**11 / 19**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**- / 10**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**75 / 70**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**10 / 15**	kJ/m²	ISO 180/1A
Izod notched impact strength	**10 / 10**	kJ/m²	ISO 180/1A

[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	**200 / ***	°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	**110 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.5 / ***	mm	-
[C] Burning rate, FMVSS, Thickness 1 mm	**63.6**	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.65 / 9.78**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**4.66 / 4.08**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**0.03 / 0.12**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**0.03 / 0.09**	E-4	IEC 62631-2-1
[C] Volume resistivity	**3.88E12 / 9.6E12**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / >1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**32.9 / 27.6**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**500 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Density	**1360 / -**	kg/m³	ISO 1183
Bulk density	**700**	kg/m³	-

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**280**	°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	**270 - 290**	°C	-
Mold temperature	**80 - 100**	°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): 270 - 290 °C
admissible residence time at Tmax <5 min
Mold temperature: 80 - 100 °C