Durethan® BKV25FN01 000000

PA6-GF25 FR(40+30) Envalior

Product Texts

Injection Molding, 25% Glass Reinforced, Flame Retardant (halogen free), Heat Stabilized, Improved flow

ISO 1043 PA6-GF25 FR(40+30)

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.3 / ***	%	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	**9300 / 5800**	MPa	ISO 527
[C] Stress at break	**130 / 80**	MPa	ISO 527
[C] Strain at break	**3.1 / 6.5**	%	ISO 527
Flexural modulus, 23°C	**9000 / 5500**	MPa	ISO 178
Flexural strength	**205 / 140**	MPa	ISO 178
[C] Charpy impact strength, +23°C	**60 / 65**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**- / 13**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**- / 10**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**50 / 55**	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
Temperature	**-30**	°C	-
Ball indentation hardness	**183 / -**	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**222 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**202 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**220 / ***	°C	ISO 75-1/-2
Vicat softening temperature, B	**210 / ***	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**20 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**80 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**V-0 / ***	class	IEC 60695-11-10
Thickness tested	**1.5 / ***	mm	-
Burning behav. at thickness h	**V-0 / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-
[C] Burning Behav. 5V at thickness h	**5VA / ***	class	IEC 60695-11-20
Thickness tested	**1.5 / ***	mm	-
[C] Oxygen index	**32 / ***	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**0.75**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**1.5**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**3**	mm	-
Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**1.5**	mm	-
Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**3**	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**>1E13 / -**	Ohm*m	IEC 62631-3-1
[C] Electric strength	**39 / -**	kV/mm	IEC 60243-1

[C] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.5 / ***	%	Sim. to ISO 62
[C] Density	**1390 / -**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**260**	°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	**≤0.07**	%	-
Melt temperature	**250 - 270**	°C	-
Mold temperature	**80 - 100**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Pellets

Special Characteristics
Flame retardant, Halogen-free, Heat stabilized or stable to heat

Features
Thermal Stability

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 - 0.07%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING
Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 80 - 100 °C