Durethan® BKV30HTS

PA6-GF30 Envalior

Product Texts
PA 6, 30 % glass fibres, injection moulding, heat-ageing stabilized, improved ageing resistance

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.3 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.7 / ***	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	**9800 / 5200**	MPa	ISO 527
Stress at break	**170 / 75**	MPa	ISO 527
Strain at break	**3 / 8**	%	ISO 527
Charpy impact strength, +23°C	**80 / 90**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**70 / 60**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**12 / 15**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**10 / 10**	kJ/m²	ISO 179/1eA
Puncture energy, +23°C	**7 / 12**	J	ISO 6603-2

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**222 / ***	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**205 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**215 / ***	°C	ISO 75-1/-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	**3.2 / ***	mm	-
Oxygen index	**23 / ***	%	ISO 4589-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	**4.7 / 38**	-	IEC 62631-2-1
Relative permittivity, 1MHz	**3.9 / 5.1**	-	IEC 62631-2-1
Dissipation factor, 100Hz	**360 / 8500**	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	**230 / 1300**	E-4	IEC 62631-2-1
Volume resistivity	**1E13 / >1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	*** / 9E11**	Ohm	IEC 62631-3-2
Electric strength	**40 / 35**	kV/mm	IEC 60243-1
Comparative tracking index	**425 / -**	-	IEC 60112

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

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	**280**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294

Characteristics

Processing	Special Characteristics
Injection Molding	Heat stabilized or stable to heat

Delivery form
Pellets

Additives
Release agent

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

Other text information

Injection Molding
PREPROCESSING
Max. Water content: 0.1 %
Drying temperature: 80 °C

Drying time:
Dry air dryer 2-20 h (will depend on the initial moisture content)

PROCESSING
Melt temperature: 270 - 290 °C
Mold temperature: 80 - 120 °C