Durethan® BKV50H3.0 000000

PA6-GF50 Envalior

Injection Molding, 50% Glass Reinforced, Heat Stabilized

ISO 1043 PA6-GF50

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16800 / 10200	MPa	ISO 527
Stress at Break	225 / 140	MPa	ISO 527
Strain at Break	3 / 5	%	ISO 527
Impact Strength (Charpy), +23°C	100 / 110	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	90 / 90	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	20 / 25	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	15 / 15	kJ/m²	ISO 179/1eA

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
Coeff. of Linear Therm. Expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	70 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m³	ISO 1183

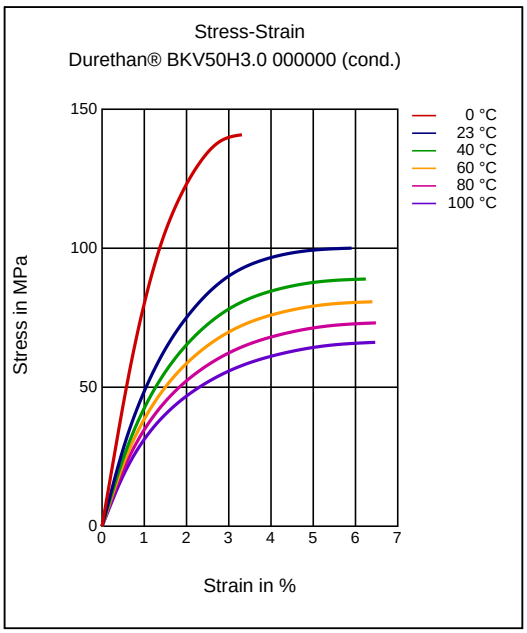
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	140 / *	cm³/g	ISO 307, 1157, 1628

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

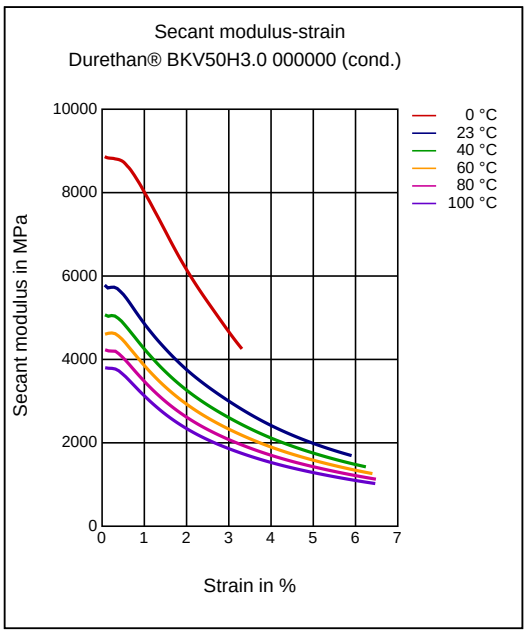
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

Stress-strain



Secant modulus-strain



Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Heat aging stabilized

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

Mold temperature: 80 - 120 °C

Disclaimer

Liability Exclusion
These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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