

Durethan® BKV50HEF 900116 DUS022
PA6-GF50

Envalior

Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF50

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16200 / 9500	MPa	ISO 527
Stress at Break	205 / 128	MPa	ISO 527
Strain at Break	2.3 / 4.3	%	ISO 527
Impact Strength (Charpy), +23°C	85 / 80	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80 / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	13 / -	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10 / -	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	1220 / 1260	N	ISO 6603-2
Puncture energy, +23°C	3.6 / 5.8	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	207 / *	°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	10 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2

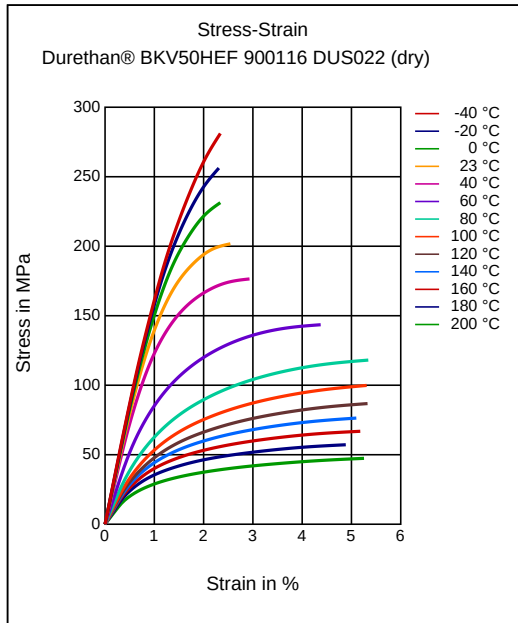
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1570 / -	kg/m ³	ISO 1183

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

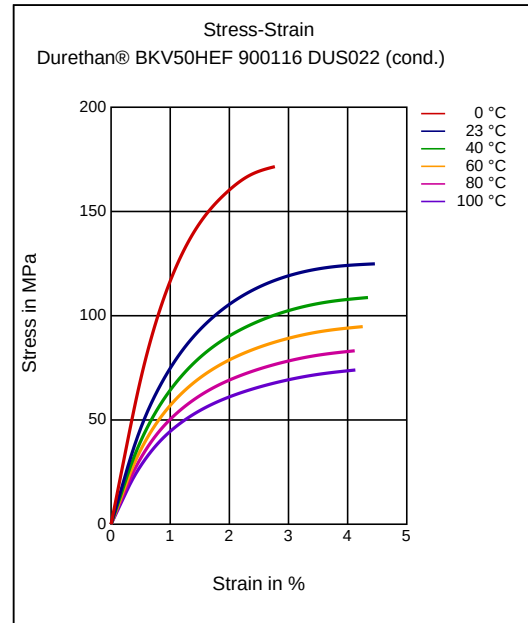
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

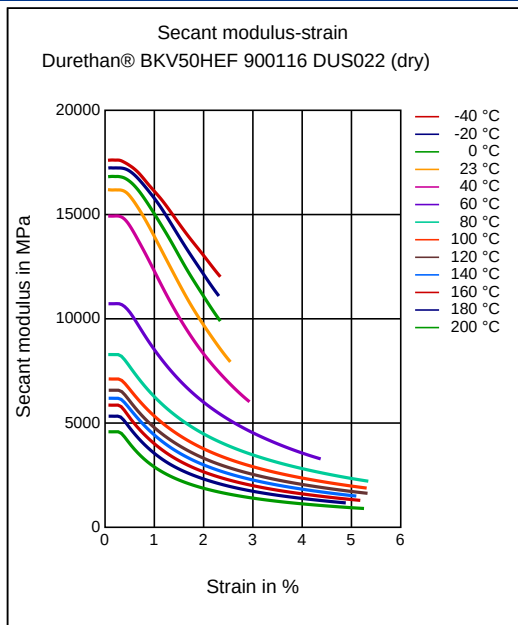
Stress-strain



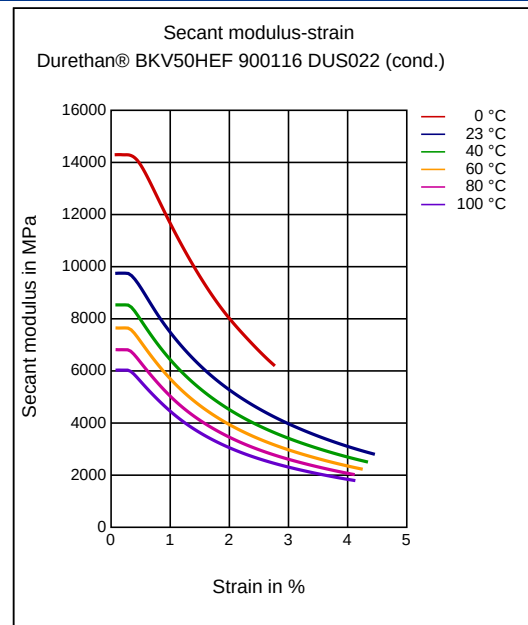
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Injection Molding

PREPROCESSING

Special Characteristics

UV stabilized, Heat aging stabilized

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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