

Durethan® BKV50H2.0EF 900116
PA6-GF50

Envalior

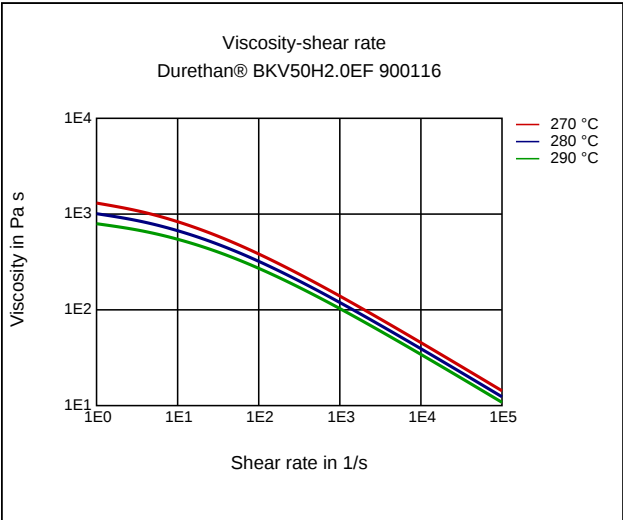
Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF50

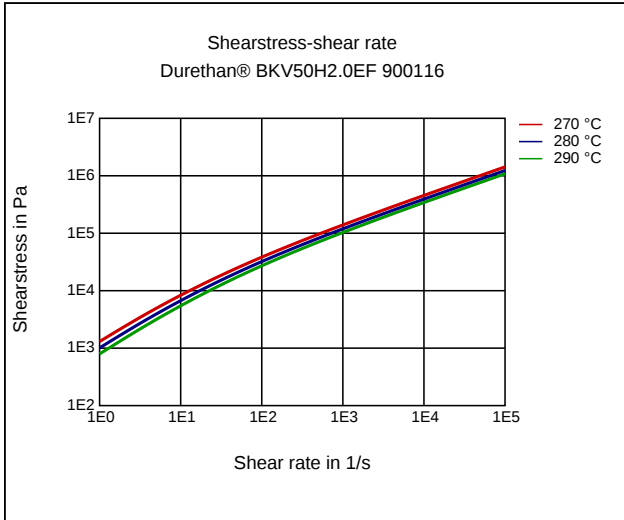
Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577
Mechanical Properties			
ISO Data			
Tensile Modulus	16200 / 10000	MPa	ISO 527
Stress at Break	215 / 140	MPa	ISO 527
Strain at Break	2.7 / 3.5	%	ISO 527
Impact Strength (Charpy), +23°C	100 / 85	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	95 / 85	kJ/m ²	ISO 179/1eU
Puncture - maximum force, +23°C	1180 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	1000 / -	N	ISO 6603-2
Puncture energy, +23°C	4.3 / -	J	ISO 6603-2
Puncture energy, -30°C	3.4 / -	J	ISO 6603-2
Thermal Properties			
ISO Data			
Melting Temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	12 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
Electrical Properties			
ISO Data			
Relative permittivity, 100Hz	4.7 / 12.9	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.2 / 4.8	-	IEC 62631-2-1
Dissipation Factor, 100Hz	135 / 2620	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	170 / 774	E-4	IEC 62631-2-1
Volume Resistivity	7E12 / 4E9	Ohm*m	IEC 62631-3-1
Electric Strength	35 / 34	kV/mm	IEC 60243-1
Comparative tracking index	400 / -	-	IEC 60112
Other Properties			
ISO Data			
Water Absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m ³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Processing Recommendation Injection Molding			
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

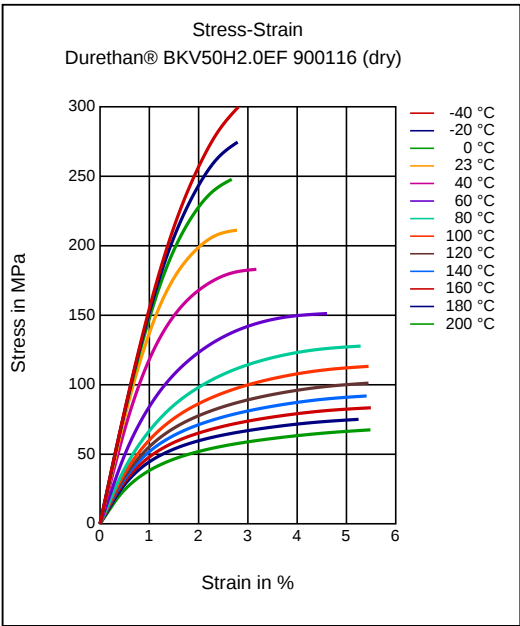
Viscosity-shear rate



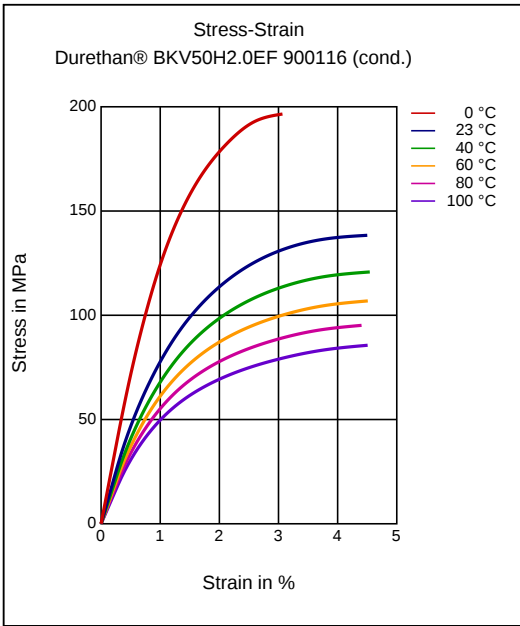
Shearstress-shear rate



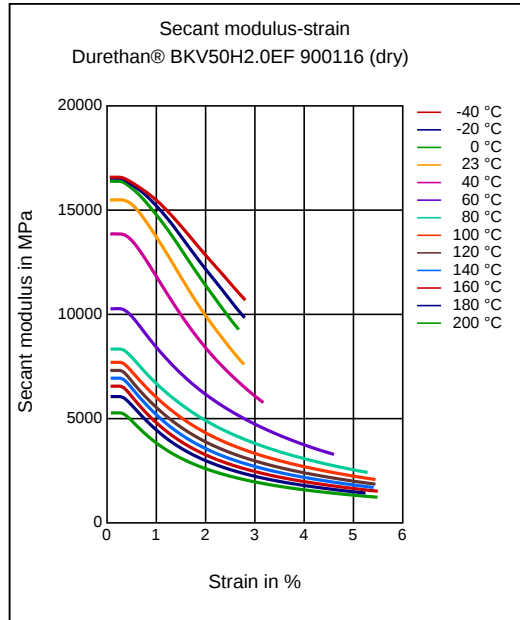
Stress-strain



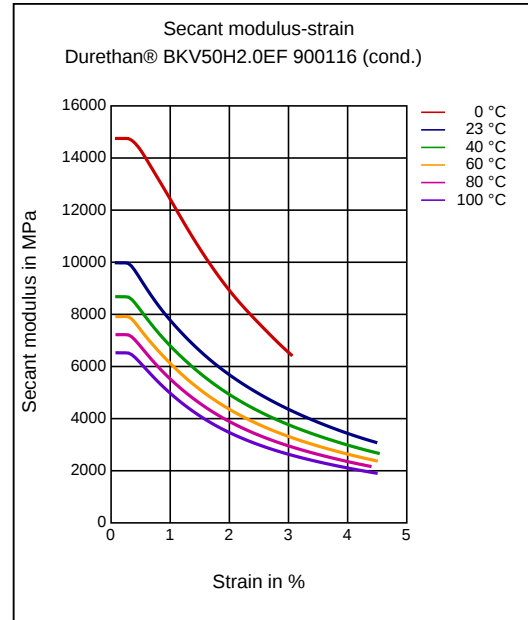
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

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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