

Durethan® BKV15GH2.0 900051
PA6-GF15

Envalior

Injection Molding, 15% Glass Reinforced, Heat Stabilized, Excellent Surface Properties

ISO 1043 PA6-GF15

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	6300 / 4000	MPa	ISO 527
Stress at Break	120 / 70	MPa	ISO 527
Strain at Break	3 / 11	%	ISO 527
Impact Strength (Charpy), +23°C	30 / 40	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	35 / 35	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	560 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	505 / -	N	ISO 6603-2
Puncture energy, +23°C	2 / -	J	ISO 6603-2
Puncture energy, -30°C	1.5 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	218 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	180 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	30 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Oxygen index	23 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.1 / 10	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.7 / 4.3	-	IEC 62631-2-1
Dissipation Factor, 100Hz	80 / 2200	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	180 / 700	E-4	IEC 62631-2-1
Volume Resistivity	1E11 / 1E9	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E13	Ohm	IEC 62631-3-2
Electric Strength	30 / 30	kV/mm	IEC 60243-1
Comparative tracking index	375 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	7.8 / *	%	Sim. to ISO 62
Humidity absorption	2.6 / *	%	Sim. to ISO 62
Density	1240 / -	kg/m ³	ISO 1183

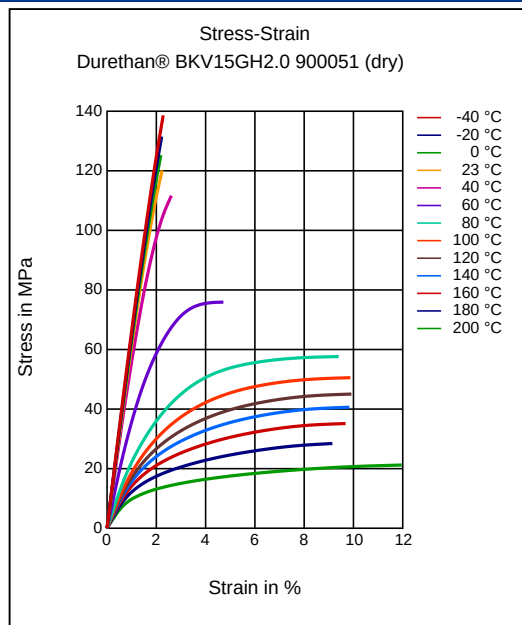
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	138 / *	cm ³ /g	ISO 307, 1157, 1628

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

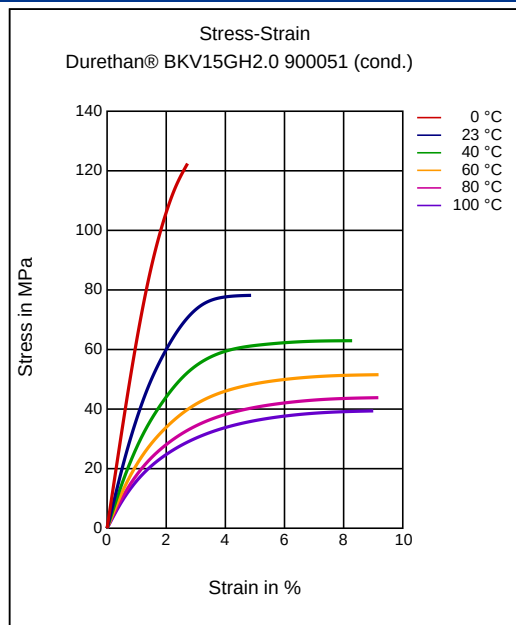
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	260 - 290	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

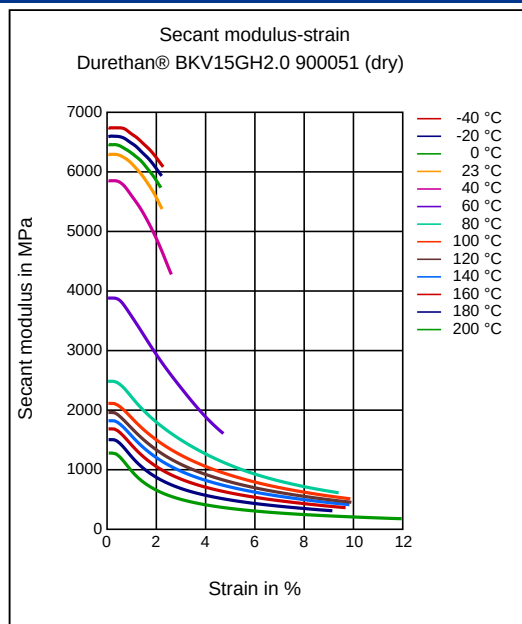
Stress-strain



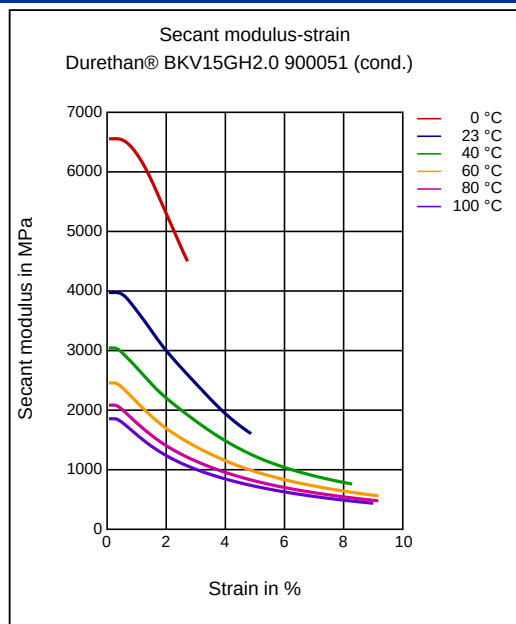
Stress-strain



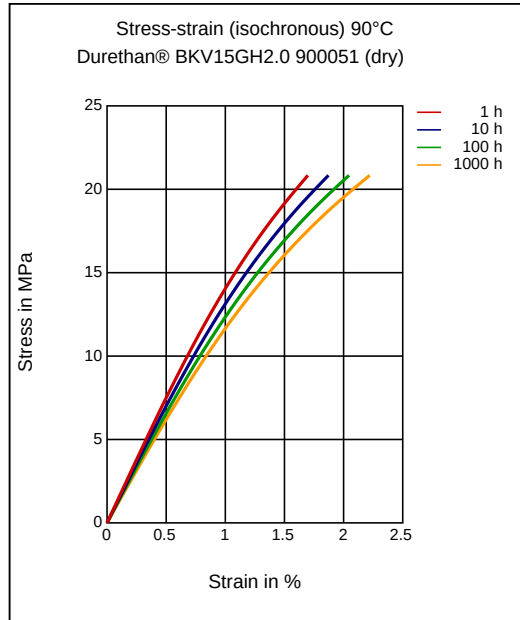
Secant modulus-strain



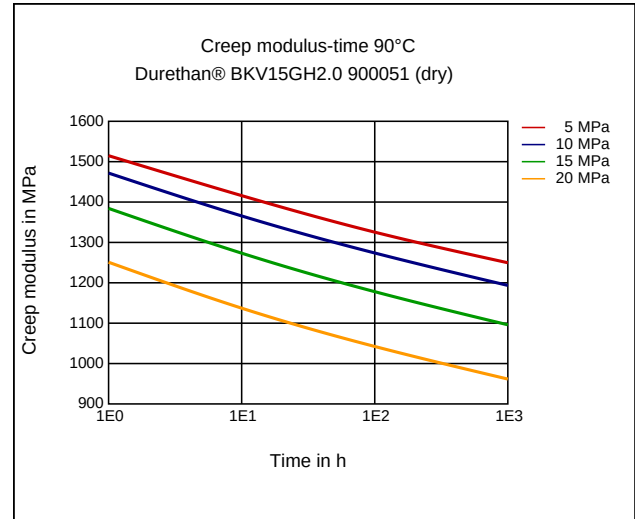
Secant modulus-strain



Stress-strain (isochronous) 90 °C



Creep modulus-time 90 °C



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

UV stabilized, 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): 260 - 290 °C

Mold temperature: 80 - 100 °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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