LANXESS
Energizing Chemistry

ALBIS

Durethan BKV15GH2.0 900051

PA6-GF15 LANXESS Deutschland GmbH

PA 6, 15 % glass fibers, injection molding, heat-aging stabilized, improved surface finish, weather stabilized

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
Charpy impact strength (+23°C)	40 / 40	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	35 / 35	kJ/m²	ISO 179/1eU
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

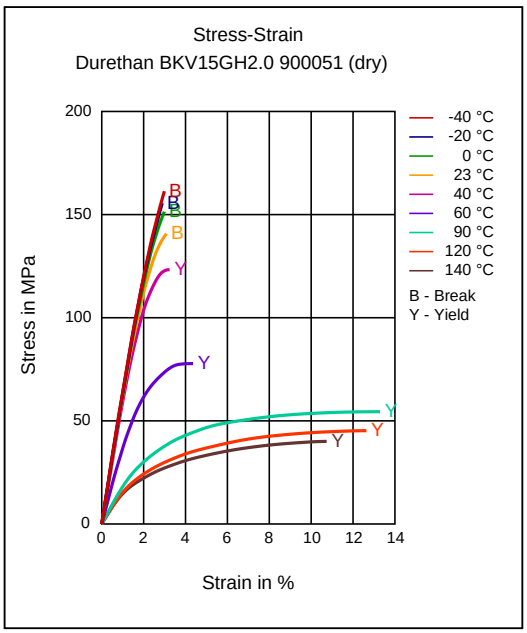
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	7.8 / *	%	Sim. to ISO 62
Humidity absorption	2.6 / *	%	Sim. to ISO 62
Density	1240 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	138 / *	cm³/g	ISO 307, 1157, 1628

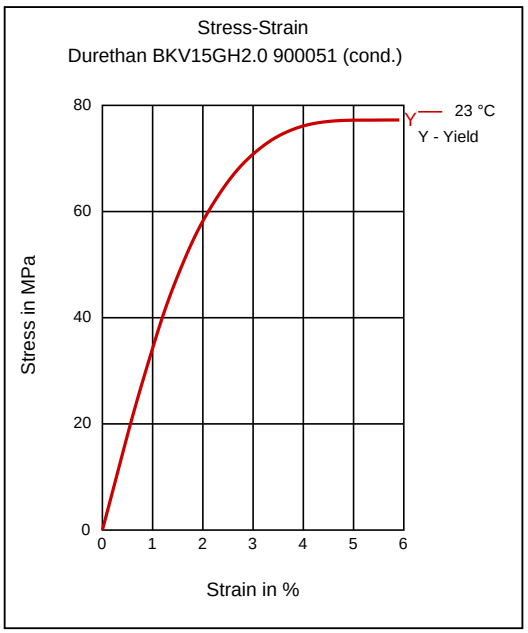
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Diagrams

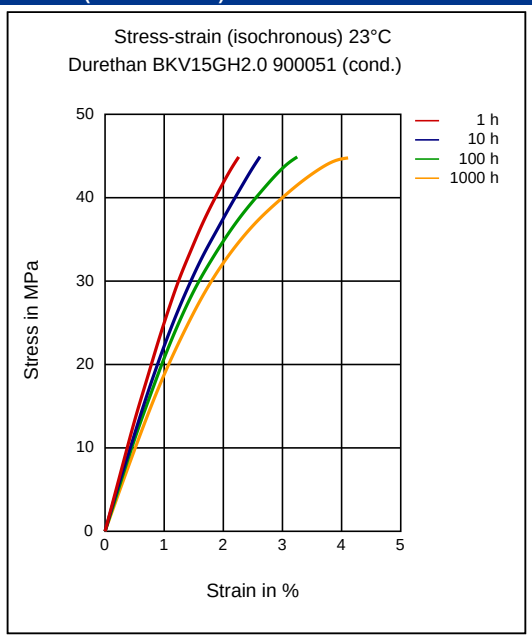
Stress-strain



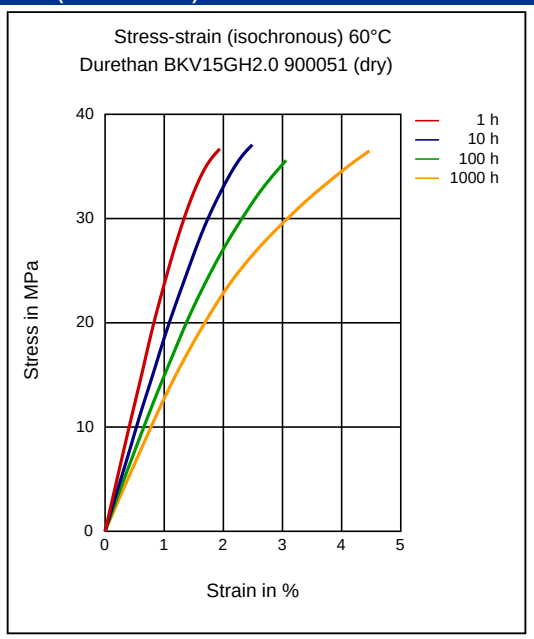
Stress-strain



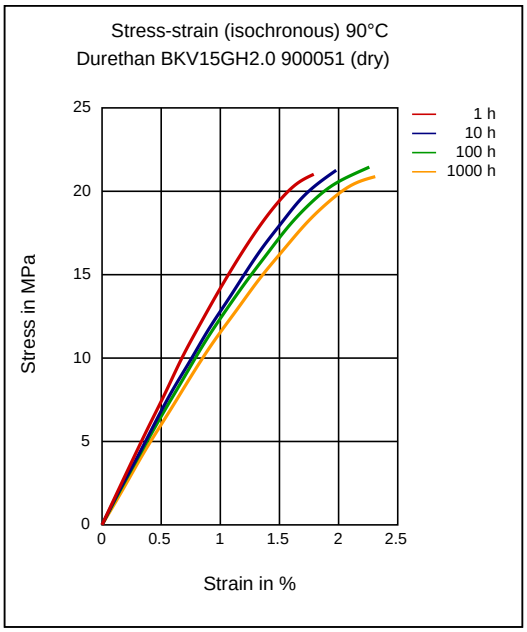
Stress-strain (isochronous) 23 °C



Stress-strain (isochronous) 60 °C



Stress-strain (isochronous) 90°C



Characteristics

Processing
Injection Molding

Special Characteristics
Heat aging stabilized

Delivery form
Pellets

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