Durethan® BC550Z 900116 DUSXBL

PA6-I — Envalior

Blow Molding Grade, Unreinforced, Heat Stabilized, Improved Impact

ISO 1043 PA6-I

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	1.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.5 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	2000 / 430	MPa	ISO 527
Yield stress	50 / -	MPa	ISO 527
Yield strain	4 / -	%	ISO 527
Nominal strain at break	>50 / -	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	100 / 130	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	25 / 25	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	5000 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	5700 / -	N	ISO 6603-2
Puncture energy, +23°C	65 / -	J	ISO 6603-2
Puncture energy, -30°C	67 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	219 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	53 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	140 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	130 / *	E-6/K	ISO 11359-1/-2

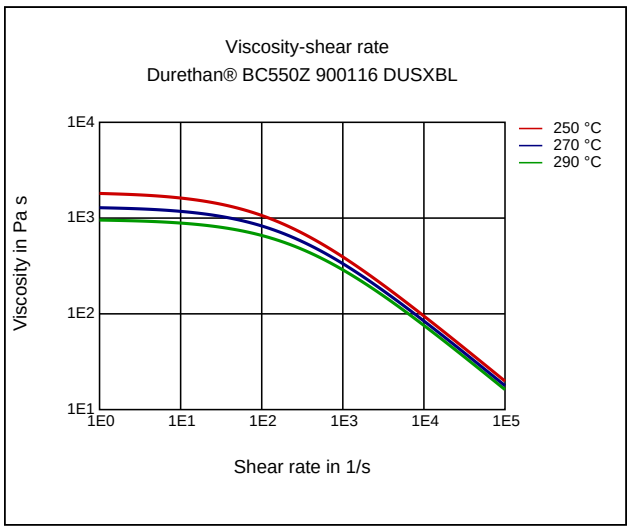
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	9.1 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1070 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

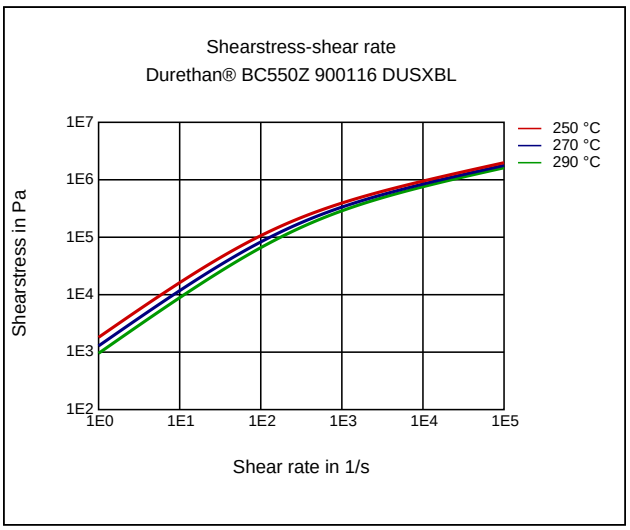
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.06	%	-
Melt temperature	230 - 280	°C	-
Mold temperature	60 - 90	°C	-

Diagrams

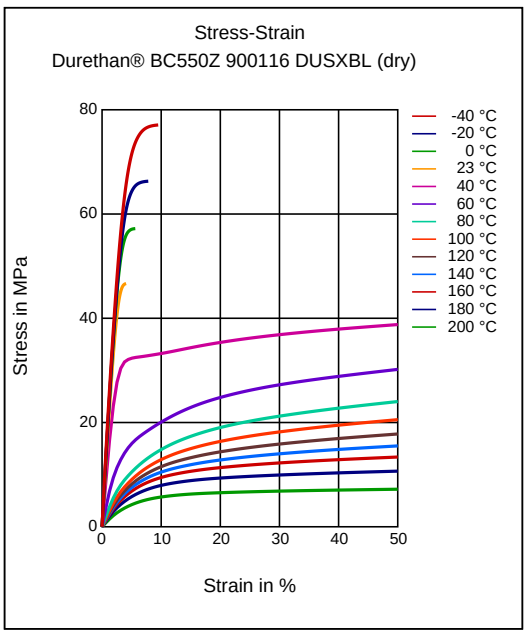
Viscosity-shear rate



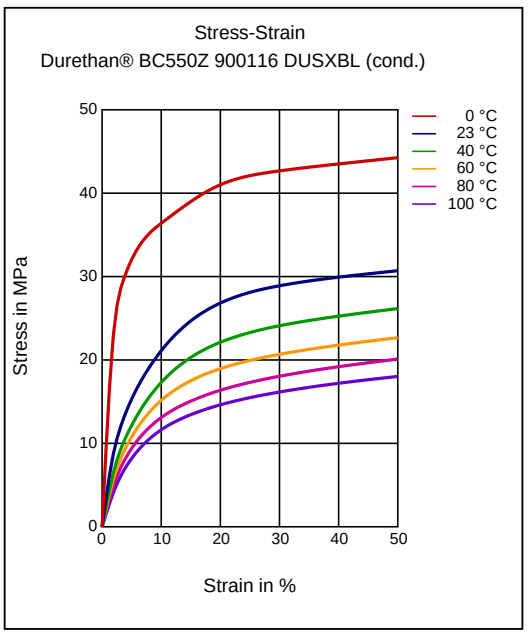
Shearstress-shear rate



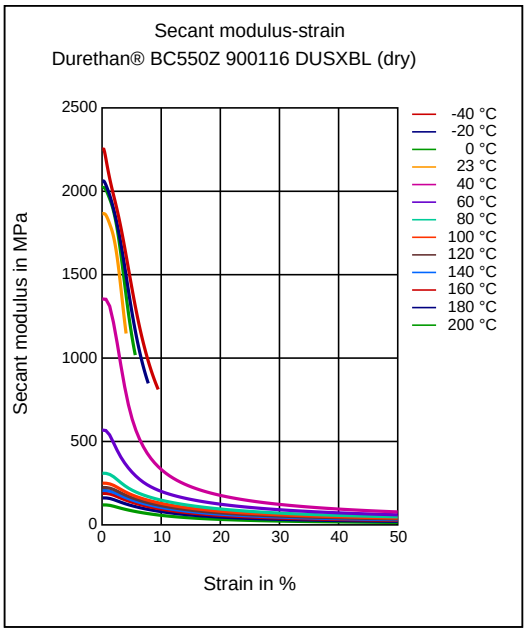
Stress-strain



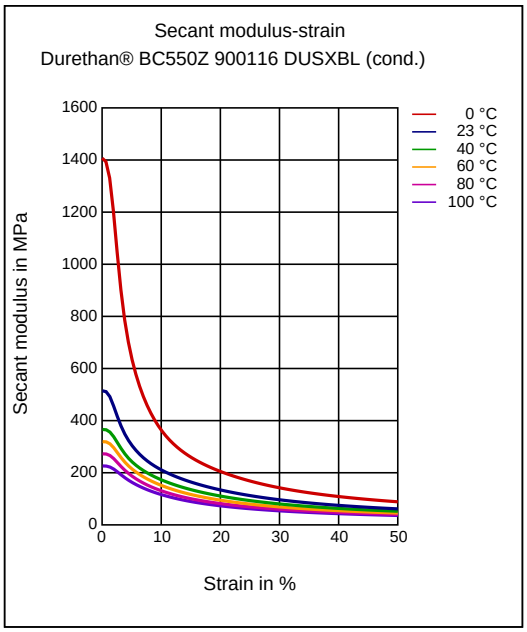
Stress-strain



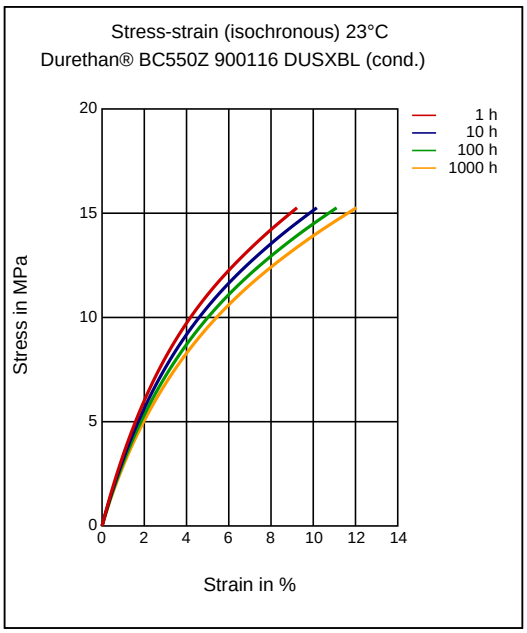
Secant modulus-strain



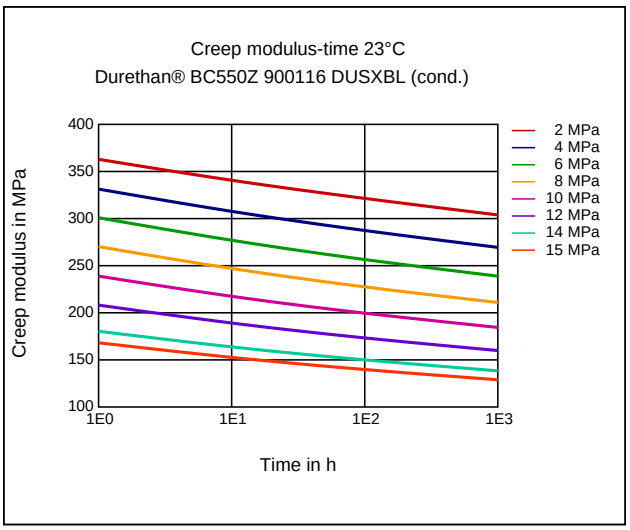
Secant modulus-strain



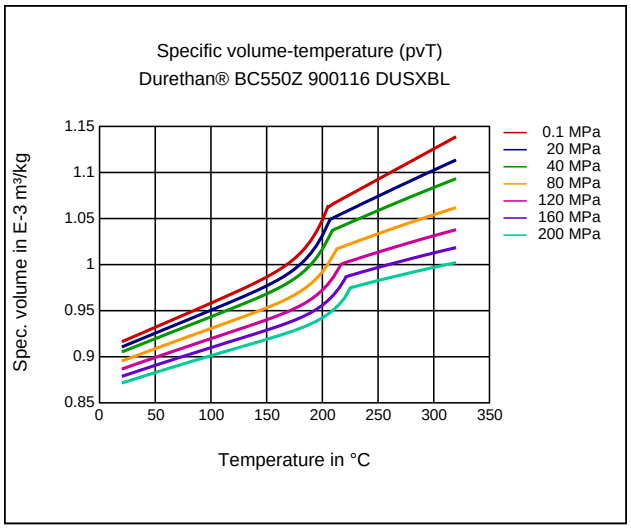
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



Specific volume-temperature (pvT)



Characteristics

Processing
Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding

Special Characteristics
Impact modified, Heat aging stabilized

Delivery form
Pellets

Injection Molding
PREPROCESSING
Residual moisture content: 0.00 - 0.06%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING
Melt temperature (Tmin - Tmax): 230 - 280 °C

Mold temperature: 60 - 90 °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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