

Durethan® BC700HTS 900116 DUSXBL
PA*-I

Envalior

Blow Molding Grade, Unreinforced, Heat Stabilized, Improved Impact

ISO 1043 PA*-I

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	980 / 210	MPa	ISO 527
Yield stress	37 / -	MPa	ISO 527
Yield strain	6.5 / -	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	105 / -	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	75 / -	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	3300 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	4100 / -	N	ISO 6603-2
Puncture energy, +23°C	50 / -	J	ISO 6603-2
Puncture energy, -30°C	50 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	212 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	48 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	53 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	200 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	200 / *	E-6/K	ISO 11359-1/-2

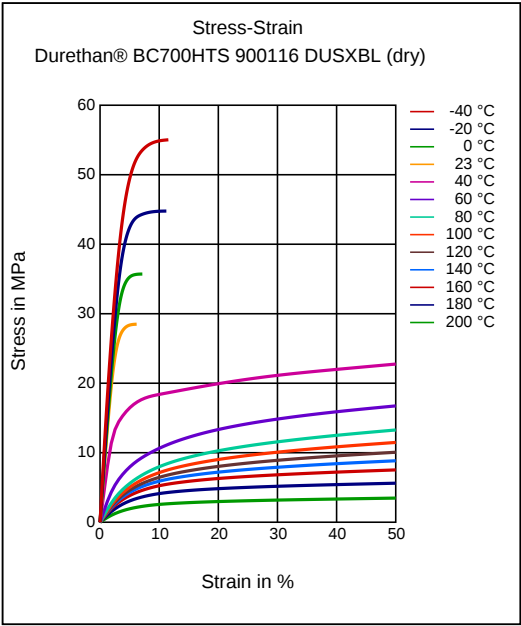
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	8.1 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1030 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

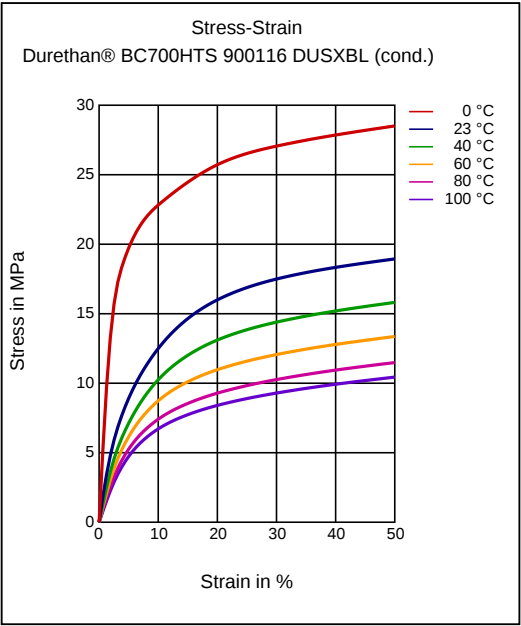
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.06	%	-
Melt temperature	230 - 280	°C	-
Mold temperature	60 - 90	°C	-

Diagrams

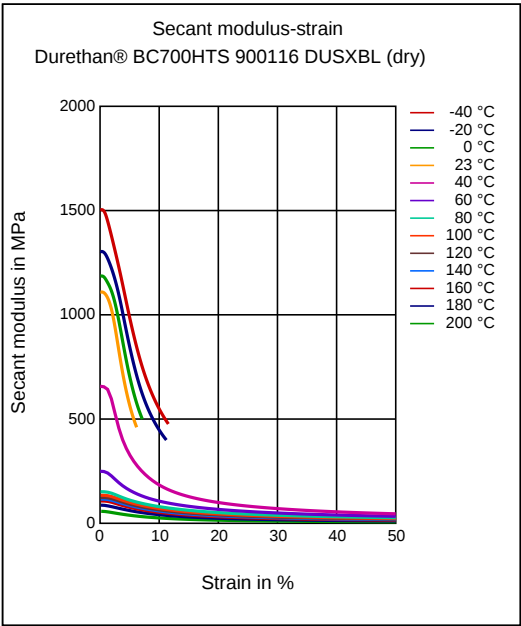
Stress-strain



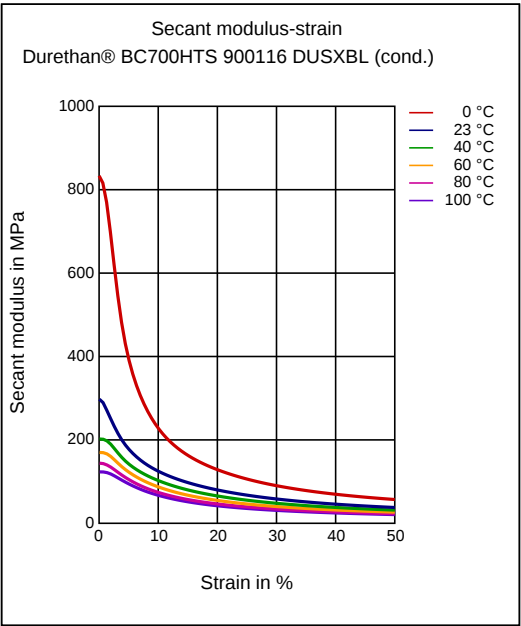
Stress-strain



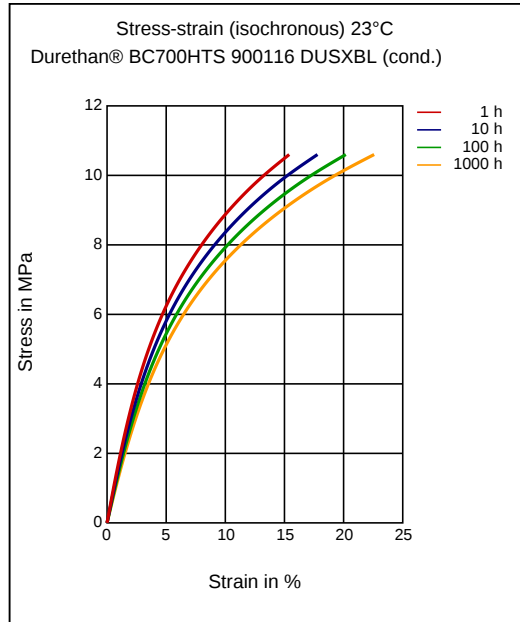
Secant modulus-strain



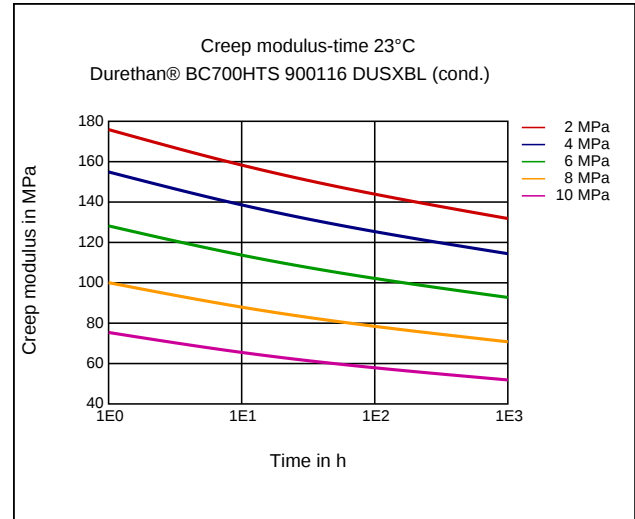
Secant modulus-strain



Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



Characteristics

Processing

Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding

Additives

Lubricants

Delivery form

Pellets

Special Characteristics

Impact modified, Heat aging stabilized

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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- risk class III applications according to EU directive 93/42/EEC

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- any critical component in any medical device that supports or sustains human life.

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