

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/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / -	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	105 / -	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	75 / -	kJ/m ²	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/m ³	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

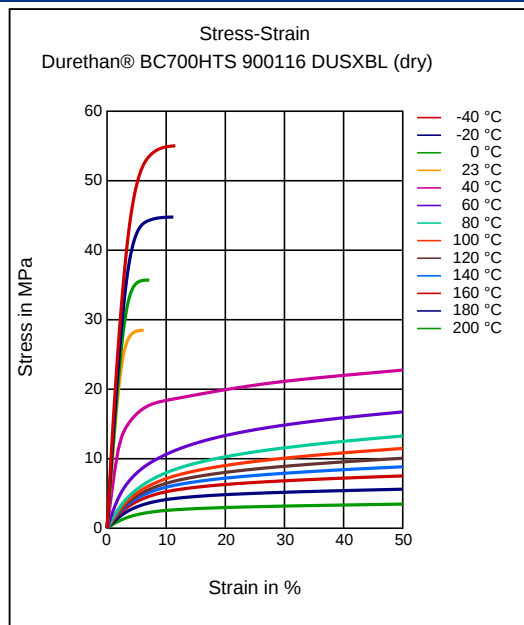
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.06	%	-
Melt temperature	230 - 280	°C	-
Mold temperature	60 - 90	°C	-

Durethan® BC700HTS 900116 DUSXBL PA*-I

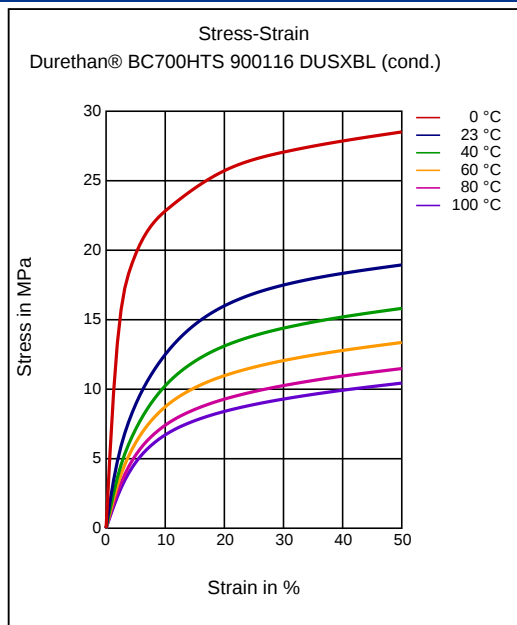
Envalior

Diagrams

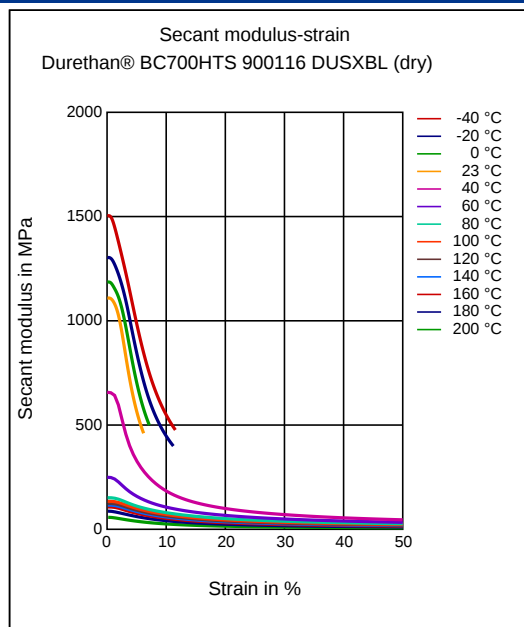
Stress-strain



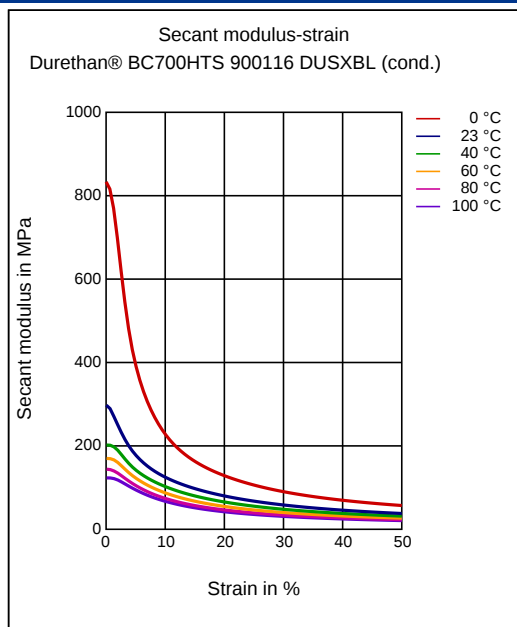
Stress-strain



Secant modulus-strain



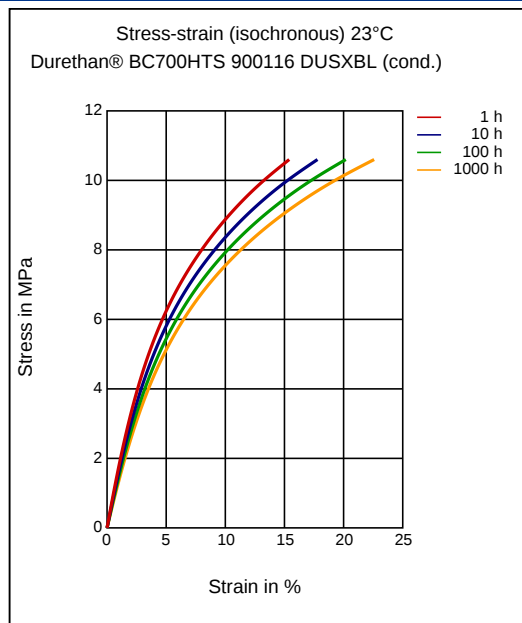
Secant modulus-strain



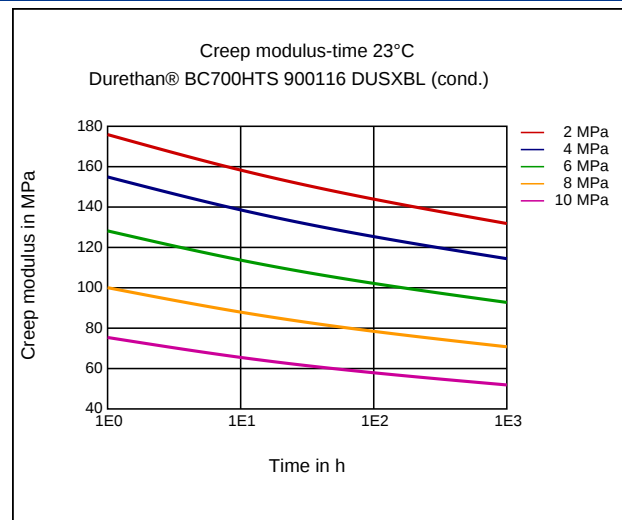
Durethan® BC700HTS 900116 DUSXBL PA*-I

Envalior

Stress-strain (isochronous) 23°C



Creep modulus-time 23°C



Characteristics

Processing

Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding

Delivery form

Pellets

Additives

Lubricants

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