

Ultramid® B3HG6 HSP BK23346

PA6-GF30

BASF

Glass fiber reinforced and heat ageing resistant injection moulding grade with excellent flowability used e.g. for plastic parts in automotive or E&E industry.

The product offers a high purity regarding ionic and halogen containing compounds.

This helps to minimize potential corrosion processes and to protect sensitive electronic components.

The product has a LS coloration (Laser Sensitive) and can be marked with Nd:YAG lasers.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	104 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9300 / 5700	MPa	ISO 527
Stress at Break	170 / 100	MPa	ISO 527
Strain at Break	3.5 / 8.1	%	ISO 527
Impact Strength (Charpy), +23°C	82 / 89	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	58 / 53	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	9.9 / 15.5	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	7.9 / 7.5	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	- / 600	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.35 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	112 / *	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

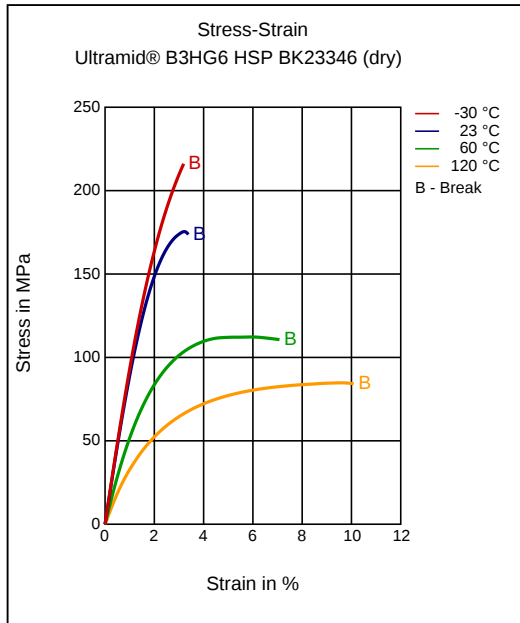
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	260 - 290	°C	-
Mold temperature	80 - 90	°C	-

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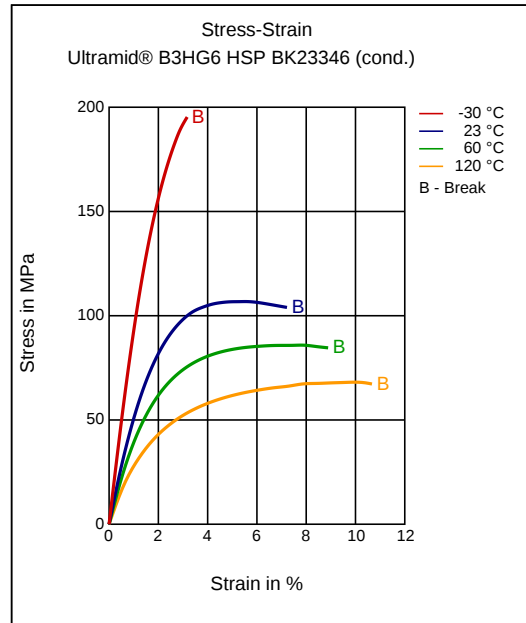
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Diagrams

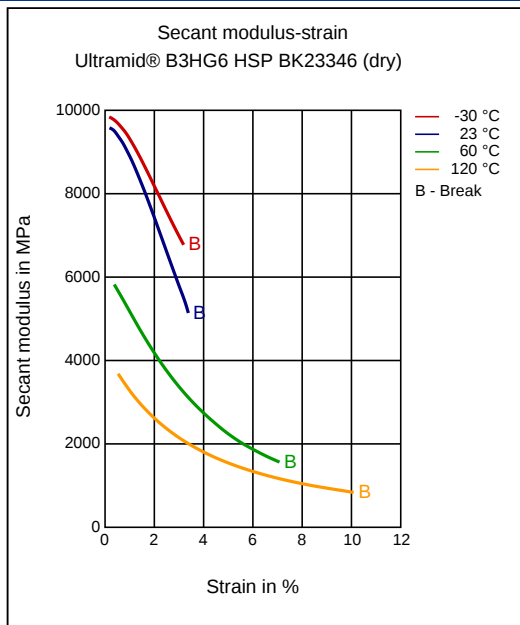
Stress-strain



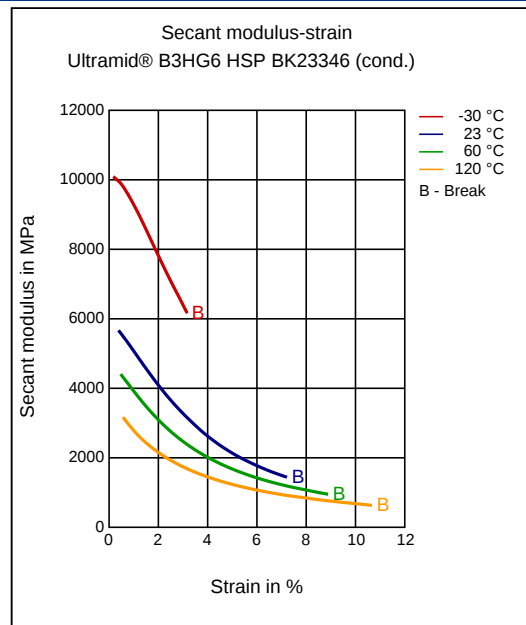
Stress-strain



Secant modulus-strain



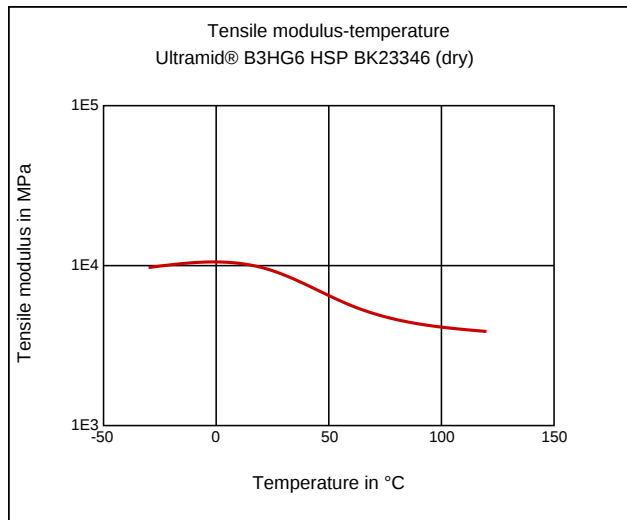
Secant modulus-strain



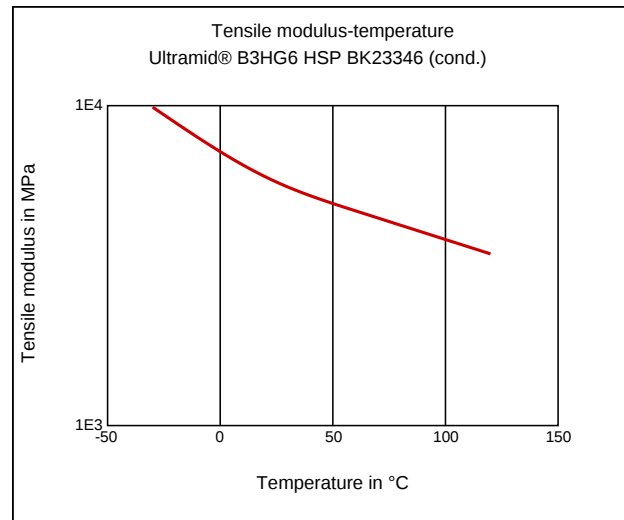
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Tensile Modulus-Temperature



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black

Additives

Lubricants

Special Characteristics

Heat aging stabilized

Applications

Automotive, Electrical and Electronical

Injection Molding

PREPROCESSING

Pre/Post-processing, Pre-drying, Temperature: 80 °C

Pre/Post-processing, Pre-drying, Time: 4 h

PROCESSING

injection molding, Melt temperature, range: 260 - 290 °C

injection molding, Melt temperature, recommended: 280 °C

injection molding, Mold temperature, range: 80 - 90 °C

injection molding, Mold temperature, recommended: 80 °C

injection molding, Dwell time, thermoplastics: 10 min