

Ultramid® B3HG7

PA6-GF35

BASF

Glass fibre 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.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	22 / *	cm ³ /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	10500 / 6300	MPa	ISO 527
Stress at Break	180 / 115	MPa	ISO 527
Strain at Break	4.7 / 10.7	%	ISO 527
Impact Strength (Charpy), +23°C	105 / 115	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	99 / 100	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	9.7 / 10.7	kJ/m ²	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

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.2 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1400 / -	kg/m ³	ISO 1183
Bulk density	700	kg/m ³	-

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	155 / *	cm ³ /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

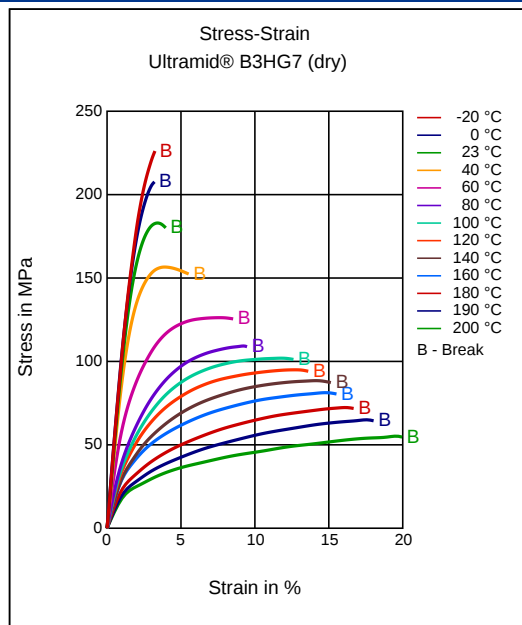
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 90	°C	-

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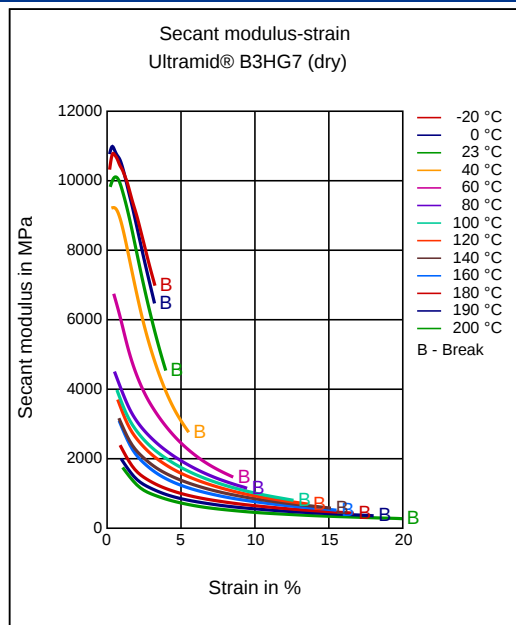
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Diagrams

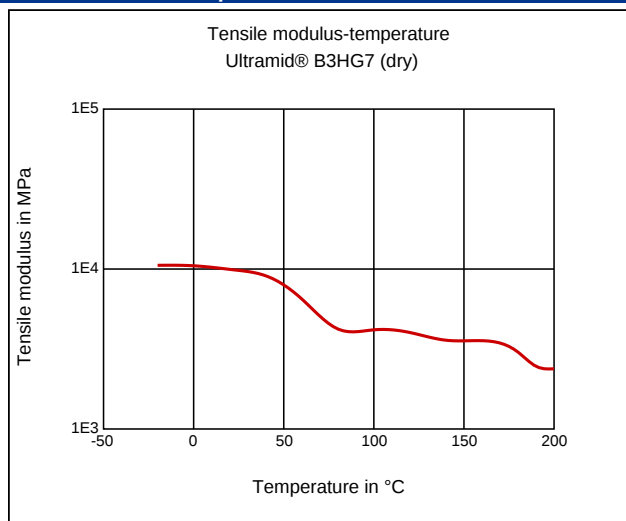
Stress-strain



Secant modulus-strain



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding, Other Extrusion

Delivery form

Pellets

Special Characteristics

Heat aging stabilized

Applications

Automotive, Electrical and Electronical

Injection Molding

PREPROCESSING

Pre/Post-processing, max. allowed water content: .15 %

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

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

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PROCESSING

injection molding, Melt temperature, range: 270 - 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