

Ultramid® B3G10 SI BK20560

PA6-GF50

BASF

Glass fibre-reinforced injection moulding grade, with excellent surface quality especially suitable for the production of visible parts with very high stiffness. Optimum surface quality is generally obtained at a very high injection speed.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16500 / 10800	MPa	ISO 527
Stress at Break	235 / 160	MPa	ISO 527
Strain at Break	3 / 5	%	ISO 527
Impact Strength (Charpy), +23°C	95 / 100	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	85 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	20 / 25	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	16 / -	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	200 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1570 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	135 / *	cm³/g	ISO 307, 1157, 1628

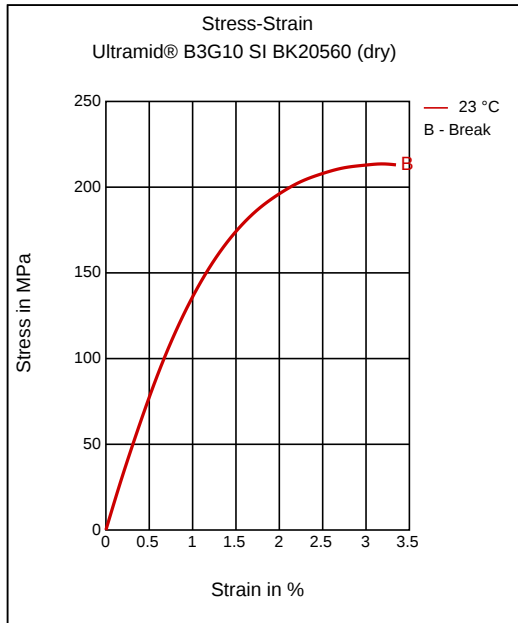
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 110	°C	-

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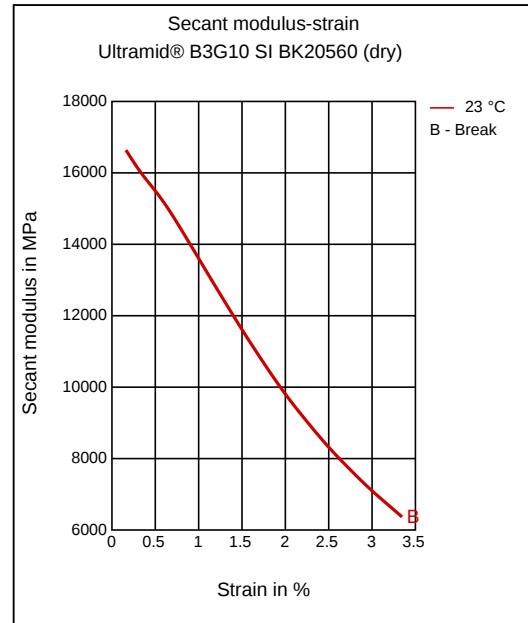
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Diagrams

Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black

Additives

Release agent

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

PROCESSING

injection molding, Melt temperature, range: 280 - 300 °C

injection molding, Melt temperature, recommended: 290 °C

injection molding, Mold temperature, range: 80 - 110 °C

injection molding, Mold temperature, recommended: 100 °C

injection molding, Dwell time, thermoplastics: 10 min