

Ultramid® B3WG6 BGVW BK00564
PA6-GF30

BASF

Glass fibre reinforced and heat ageing resistant injection moulding grade used e.g. for automobile manifolds

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	9600 / 5600	MPa	ISO 527
Stress at Break	180 / 90	MPa	ISO 527
Strain at Break	3 / 6	%	ISO 527
Impact Strength (Charpy), +23°C	80 / 80	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	65 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	12 / 20	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	9 / -	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)	218 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	18.4 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	96.4 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Electric Strength	40 / 31	kV/mm	IEC 60243-1

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.6 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m³	ISO 1183

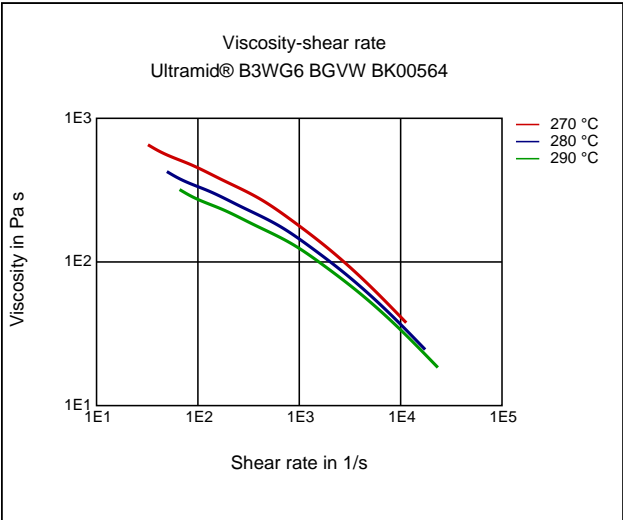
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	142 / *	cm³/g	ISO 307, 1157, 1628

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

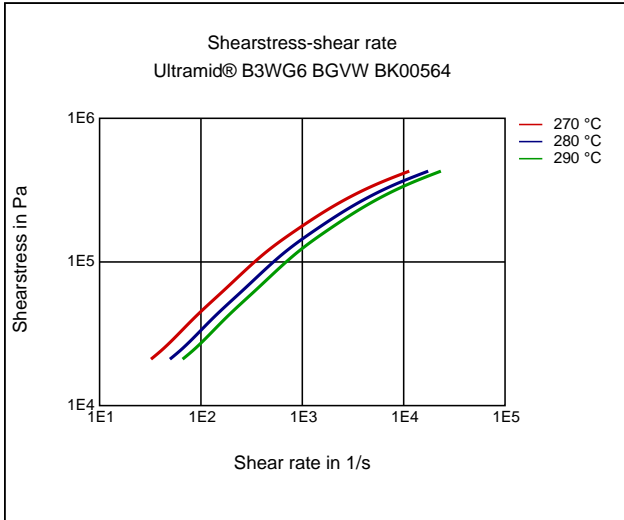
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 90	°C	-

Diagrams

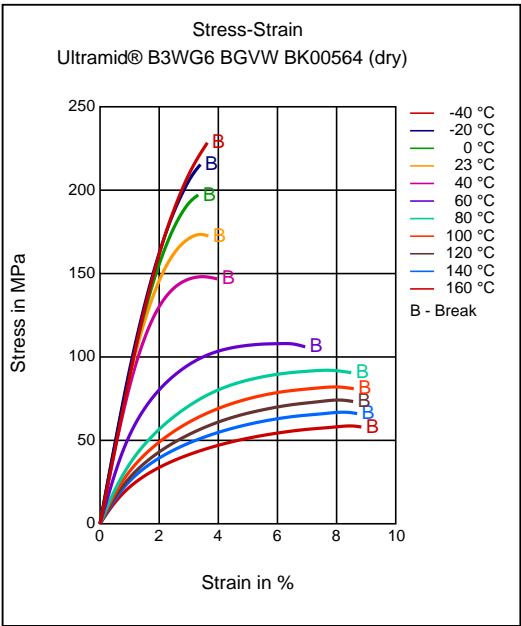
Viscosity-shear rate



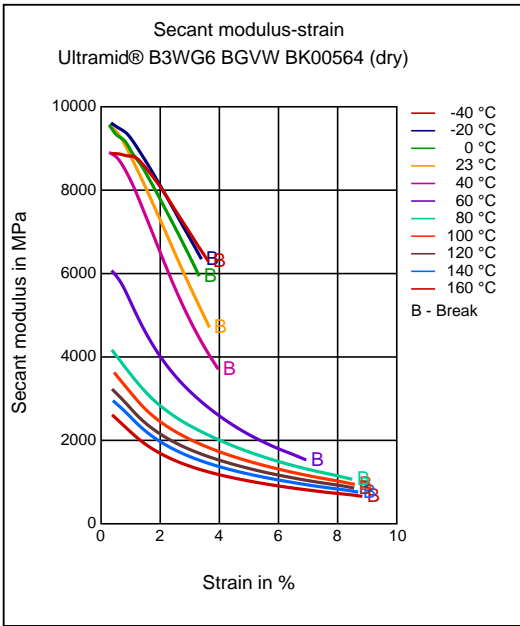
Shearstress-shear rate



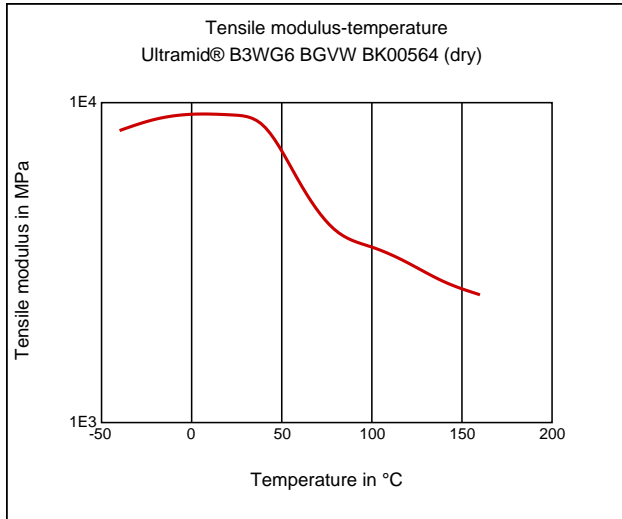
Stress-strain



Secant modulus-strain



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding

Delivery form

Black

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: 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

Chemical Media Resistance

Acids

✓ Acetic Acid (5% by mass) (23°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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