

Durethan® BG30XF30 000000
PA6-(GF+GB)30 FR(17)

Envalior

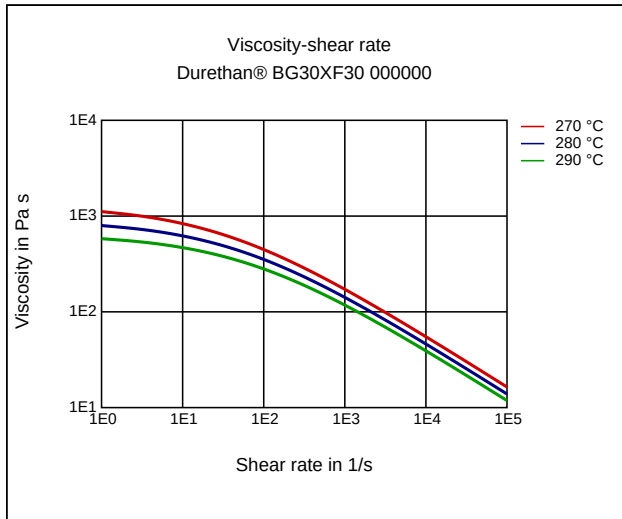
Injection Molding, 30% Glass Fiber/Glass Beads, Flame Retardant, Heat Stabilized, Excellent Surface Properties, Low Warpage

ISO 1043 PA6-(GF+GB)30 FR(17)

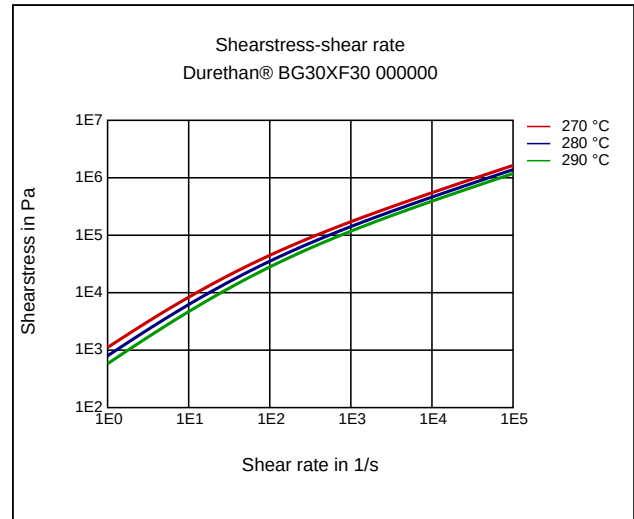
Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
Mechanical Properties			
ISO Data			
Tensile Modulus	7500 / 4200	MPa	ISO 527
Stress at Break	105 / 65	MPa	ISO 527
Strain at Break	2.7 / 4.4	%	ISO 527
Impact Strength (Charpy), +23°C	40 / 45	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	30 / 35	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	650 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	550 / -	N	ISO 6603-2
Puncture energy, +23°C	2.4 / -	J	ISO 6603-2
Puncture energy, -30°C	1.8 / -	J	ISO 6603-2
Thermal Properties			
ISO Data			
Melting Temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	185 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	30 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0 / *	class	UL 94
Burning Behav. 5V at Thickness h	5VA / *	class	IEC 60695-11-20
Thickness tested	1.5 / *	mm	-
Oxygen index	32 / *	%	ISO 4589-1/-2
Electrical Properties			
ISO Data			
Electric Strength	33 / -	kV/mm	IEC 60243-1
Other Properties			
ISO Data			
Density	1630 / -	kg/m ³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Processing Recommendation Injection Molding			
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

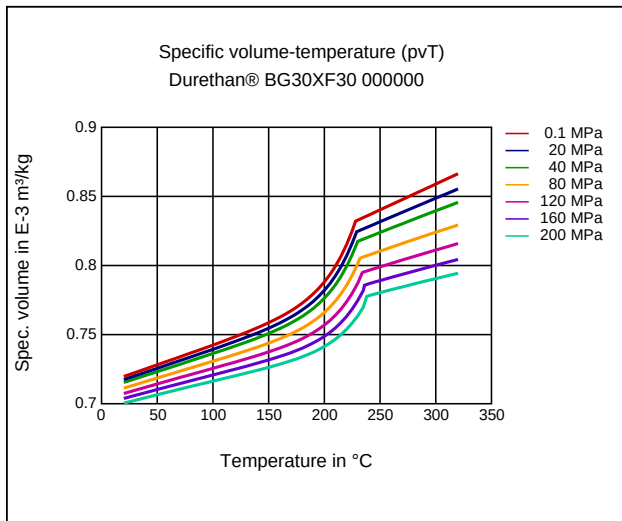
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Flame retardant, Heat aging stabilized

Features

Low Warpage

Injection Molding

PREPROCESSING

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 100 °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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- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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