

Durethan® BKV30FN00 000000
PA6-GF30 FR(40+30)

Envalior

Injection Molding, 30% Glass Reinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA6-GF30 FR(40+30)

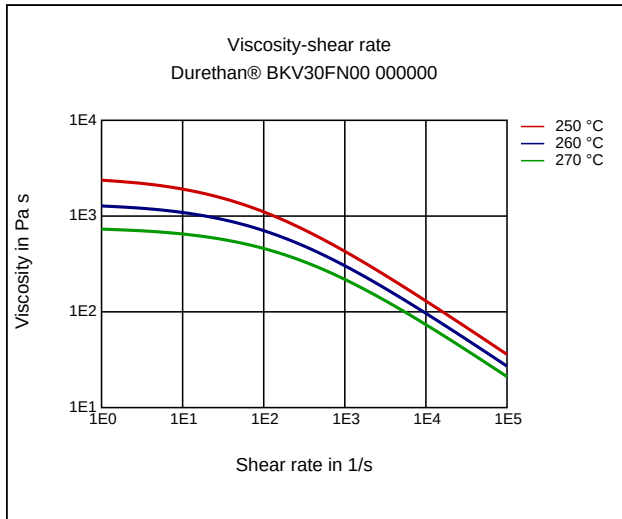
Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577
Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	11000 / 6700	MPa	ISO 527
Stress at Break	135 / 90	MPa	ISO 527
Strain at Break	3 / 6.1	%	ISO 527
Impact Strength (Charpy), +23°C	65 / 65	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	60 / -	kJ/m ²	ISO 179/1eU
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)	204 / *	°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	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0 / *	class	UL 94
Burning Behav. at thickness h	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	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.2 / 8.8	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.7 / 4.2	-	IEC 62631-2-1
Dissipation Factor, 100Hz	160 / 1220	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	155 / 695	E-4	IEC 62631-2-1
Volume Resistivity	>1E13 / 7.1E10	Ohm*m	IEC 62631-3-1
Electric Strength	40 / 36	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1440 / -	kg/m ³	ISO 1183
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°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	2 - 6	h	-
Processing humidity	≤0.07	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

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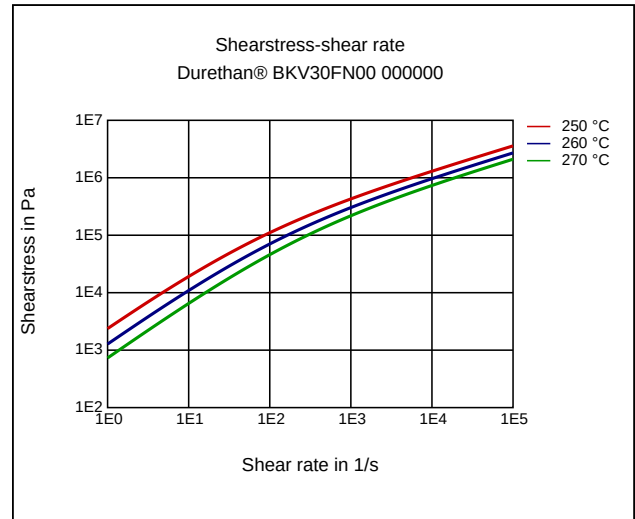
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Diagrams

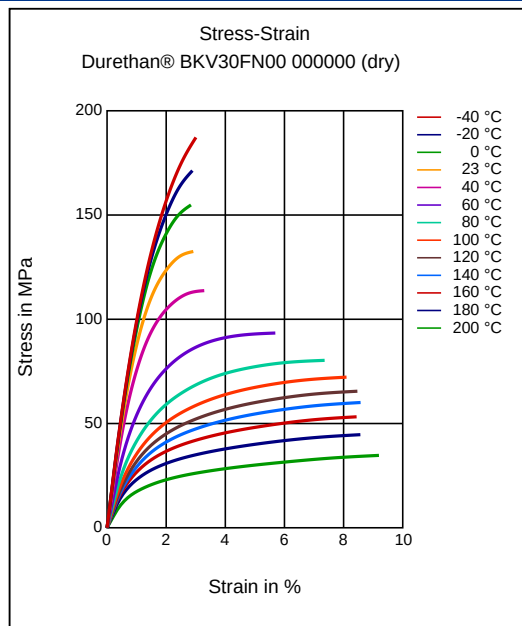
Viscosity-shear rate



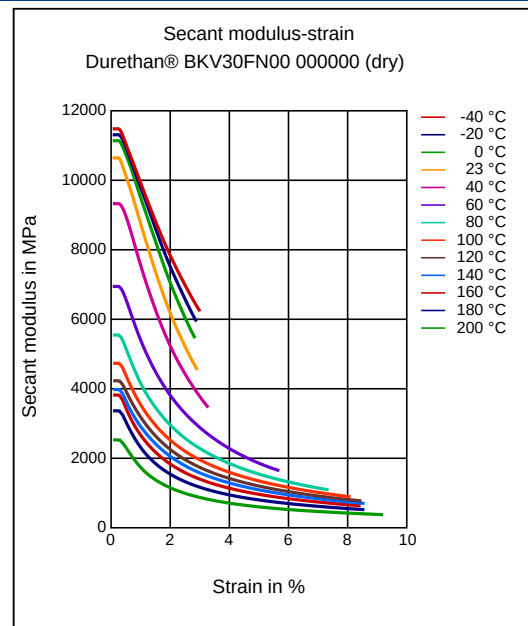
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Flame retardant, Heat aging stabilized

Injection Molding

PREPROCESSING

Residual moisture content: 0.03 - 0.07%

Drying temperature dry air dryer: 80 °C

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Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 80 - 100 °C