

Durethan® BG30FN05 000000
PA6-GX30 FR(40+30)

Envalior

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

ISO 1043 PA6-GX30 FR(40+30)

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.8 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577
Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	5400 / 2100	MPa	ISO 527
Stress at Break	75 / -	MPa	ISO 527
Strain at Break	2.2 / -	%	ISO 527
Impact Strength (Charpy), +23°C	40 / 60	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	38 / 25	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
Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	100 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	195 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	60 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	70 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0 / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	550 / -	-	IEC 60112
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1410 / -	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	240 - 260	°C	-
Mold temperature	80 - 100	°C	-

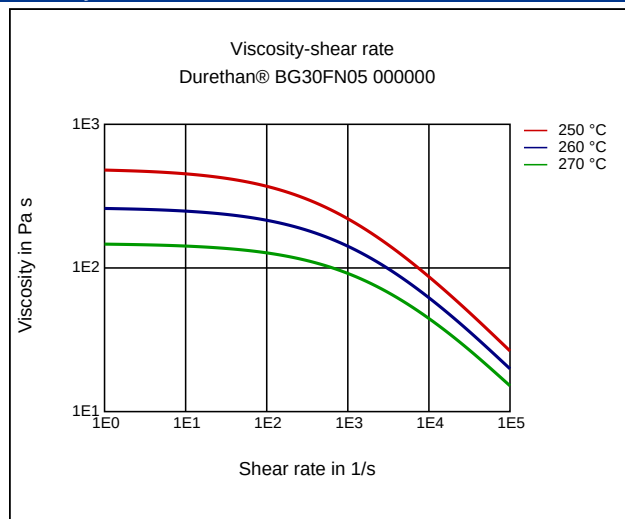
Durethan® BG30FN05 000000

PA6-GX30 FR(40+30)

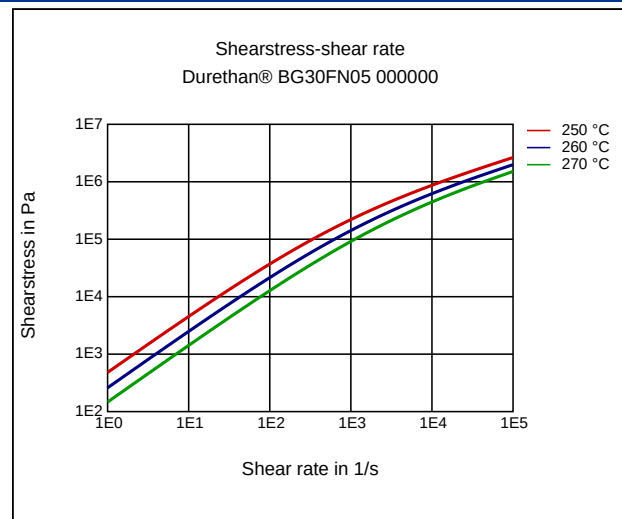
Envalior

Diagrams

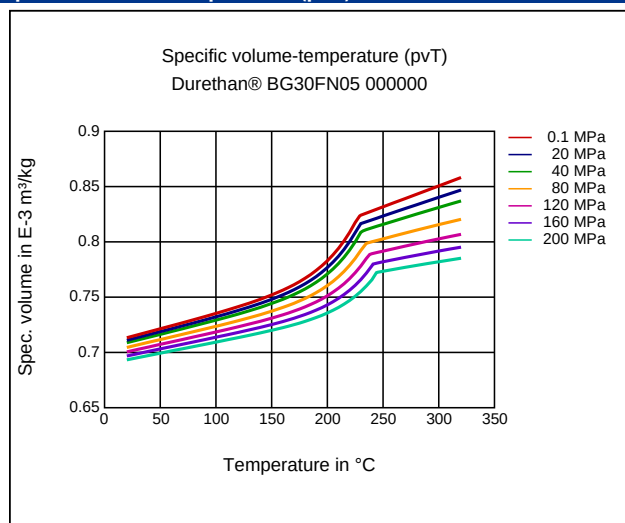
Viscosity-shear rate



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 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 240 - 260 °C

admissible residence time at Tmax <5 min

Mold temperature: 80 - 100 °C