

Durethan® BG30XH3.0XF 000000

PA6-(GF+GB)30

Envalior

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

ISO 1043 PA6-(GF+GB)30

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	5200 / 2600	MPa	ISO 527
Stress at Break	85 / 45	MPa	ISO 527
Strain at Break	3.2 / 7	%	ISO 527
Impact Strength (Charpy), +23°C	50 / 55	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	40 / 35	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	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)	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	40 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	110 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	475 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1320 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°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	≤0.12	%	-
Melt temperature	250 - 290	°C	-
Mold temperature	80 - 100	°C	-

Characteristics

Processing	Special Characteristics
Injection Molding	Heat aging stabilized

Delivery form	Features
Pellets	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): 250 - 290 °C
 Mold temperature: 80 - 100 °C