

Durethan® BKV60H3.0EF 900116
PA6-GF60

Envalior

Injection Molding, 60% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF60

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	20000 / 12500	MPa	ISO 527
Stress at Break	230 / 158	MPa	ISO 527
Strain at Break	2.5 / 3.5	%	ISO 527
Impact Strength (Charpy), +23°C	95 / 95	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	95 / 95	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	17 / 24	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	17 / -	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	1300 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	1200 / -	N	ISO 6603-2
Puncture energy, +23°C	4.5 / -	J	ISO 6603-2
Puncture energy, -30°C	3.8 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	221 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	213 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	10 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.3 / 8.71	-	IEC 62631-2-1
Relative permittivity, 1MHz	5.07 / 4.68	-	IEC 62631-2-1
Dissipation Factor, 100Hz	0.02 / 0.1	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	0.03 / 0.06	E-4	IEC 62631-2-1
Volume Resistivity	6.14E12 / 6.6E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 2.64E14	Ohm	IEC 62631-3-2
Electric Strength	28.6 / 25.8	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1710 / -	kg/m ³	ISO 1183

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	2 - 6	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

Durethan® BKV60H3.0EF 900116
PA6-GF60

Envalior

Processing

Injection Molding

Special Characteristics

Heat aging stabilized

Delivery form

Pellets

Injection Molding

PREPROCESSING

Residual moisture content: 0.05 - 0.15%

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 - 120 °C