

Durethan® BKV50GH2.0EF 900051
PA6-GF50

Envalior

Injection Molding, 50% Glass Reinforced, Heat Stabilized, Improved flow, Excellent Surface Properties

ISO 1043 PA6-GF50

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.1 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16500 / 11500	MPa	ISO 527
Stress at Break	220 / 150	MPa	ISO 527
Strain at Break	3 / 4.5	%	ISO 527
Notched Impact Strength (Charpy), +23°C	15 / 17	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	13 / 12	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	15500 / 11000	MPa	ISO 178
Flexural strength	340 / 230	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	15 / 18	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	15 / 13	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	90 / 85	kJ/m²	ISO 180/1U

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)	219 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	15.1 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	71.4 / *	E-6/K	ISO 11359-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1570 / -	kg/m³	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	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

Processing	Additives
Injection Molding	Release agent

Delivery form	Special Characteristics
Pellets	Heat aging stabilized

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 - 120 °C