

Durethan® BKV140 000000 DUS008
PA6-I-GF40

Envalior

Injection Molding, 40% Glass Reinforced, Improved Impact

ISO 1043 PA6-I-GF40

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	12000 / 7100	MPa	ISO 527
Stress at Break	185 / 120	MPa	ISO 527
Strain at Break	3.5 / 6.5	%	ISO 527
Impact Strength (Charpy), +23°C	105 / 115	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	100 / 80	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 25	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10 / 15	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	1050 / 1300	N	ISO 6603-2
Puncture - maximum force, -30°C	850 / 900	N	ISO 6603-2
Puncture energy, +23°C	4.5 / 7.5	J	ISO 6603-2
Puncture energy, -30°C	3 / 3	J	ISO 6603-2

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)	201 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	217 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	15 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	100 / *	E-6/K	ISO 11359-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	5.7 / *	%	Sim. to ISO 62
Density	1450 / -	kg/m ³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	290	°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	260 - 290	°C	-
Mold temperature	80 - 100	°C	-

Characteristics
Processing

Injection Molding

Special Characteristics

Impact modified

Delivery form

Pellets

Injection Molding
PREPROCESSING

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

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Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 260 - 290 °C

Mold temperature: 80 - 100 °C