Property Data

Envalior
Imagine the Future

Durethan® BKV50PH2.0

PA6–GF50

50% Glass Reinforced, Injection Molding, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294–4
Molding shrinkage (normal)	0.7 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	16300 / 9800	MPa	ISO 527–1/–2
Stress at break	220 / 140	MPa	ISO 527–1/–2
Strain at break	3 / 6	%	ISO 527–1/–2
Flexural modulus	15100 / 9700	MPa	ISO 178
Flexural strength	360 / 230	MPa	ISO 178
Tensile modulus (200°C)	4910	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	100 / 105	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	100 / 90	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 25	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	17 / 15	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	20 / 27	kJ/m²	ISO 180/1A
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	210 / *	°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)	0.15 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.8 / *	E–4/°C	ISO 11359–1/–2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	**DRY / COND**		
Water absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1570 / –	kg/m³	ISO 1183
PROCESSING RECOMMENDATIONS	**VALUE**		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2–6	h	
Residual moisture content	0.03–0.12	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–120	°C	