

Durethan® BKV50PH3.0

PA6—GF50

50% Glass Reinforced, Injection Molding, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.75 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	16500 / 9900	MPa	ISO 527-1/-2
Stress at break	215 / 140	MPa	ISO 527-1/-2
Strain at break	3 / 6	%	ISO 527-1/-2
Flexural modulus	16200 / 10300	MPa	ISO 178
Flexural strength	350 / 230	MPa	ISO 178
Charpy impact strength (+23°C)	95 / 95	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	95 / 90	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	17 / 25	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 15	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	17 / 30	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

OTHER PROPERTIES

DRY / COND

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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	