

Durethan® BKV40PH3.0

PA6—GF40

40% Glass Reinforced, Injection Molding, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	12500 / 8000	MPa	ISO 527-1/-2
Stress at break	200 / 125	MPa	ISO 527-1/-2
Strain at break	3.5 / 7.5	%	ISO 527-1/-2
Flexural modulus	12300 / 7600	MPa	ISO 178
Flexural strength	320 / 200	MPa	ISO 178
Charpy impact strength (+23°C)	100 / 100	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	90 / 85	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 25	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	10 / 10	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 25	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)	0.16 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.9 / *	E-4/°C	ISO 11359-1/-2
OTHER PROPERTIES			
	DRY / COND		
Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m³	ISO 1183

Property Data

Durethan® BKV40PH3.0

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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	