

# Durethan<sup>®</sup> BKV40PH2.0

## PA6–GF40

40% Glass Reinforced, Injection Molding, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b><i>RHEOLOGICAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294–4
Molding shrinkage (normal)	0.7 / *	%	ISO 294–4
<b><i>MECHANICAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
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
Tensile modulus (200°C)	3930	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	100 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	90 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 25	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (–30°C)	10 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 25	kJ/m <sup>2</sup>	ISO 180/1A
<b><i>THERMAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
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

## Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b><i>ELECTRICAL PROPERTIES</i></b>			
Comparative tracking index	400 / –	V	IEC 60112
<b><i>OTHER PROPERTIES</i></b>			
Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1460 / –	kg/m <sup>3</sup>	ISO 1183
<b><i>PROCESSING RECOMMENDATIONS</i></b>			
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	