

# Durethan<sup>®</sup> BKV50H2.0EF

## PA6—GF50

Injection Molding, 50% Glass Fiber Reinforced, Heat Stabilized, High Flow

Print Date: 2025–11–26

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>	<b>DRY / COND</b>		
Molding shrinkage (parallel)	0.19 / *	%	ISO 294–4
Molding shrinkage (normal)	0.6 / *	%	ISO 294–4
<b>MECHANICAL PROPERTIES</b>	<b>DRY / COND</b>		
Tensile modulus	16200 / 10000	MPa	ISO 527–1/–2
Stress at break	215 / 140	MPa	ISO 527–1/–2
Strain at break	2.7 / 3.5	%	ISO 527–1/–2
Flexural modulus	15000 / 9900	MPa	ISO 178
Flexural strength	340 / 230	MPa	ISO 178
Tensile modulus (200°C)	5270	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	100 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	95 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Izod notched impact strength (+23°C)	17 / 20	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL PROPERTIES</b>	<b>DRY / COND</b>		
Melting temperature (10°C/min)	222 / *	°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)	0.12 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
<b>ELECTRICAL PROPERTIES</b>	<b>DRY / COND</b>		
Relative permittivity (100Hz)	4.7 / 12.9	–	IEC 62631–2–1

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Relative permittivity (1 MHz)	4.2 / 4.8	–	IEC 62631-2-1
Dissipation factor (100 Hz)	135 / 2620	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	170 / 774	E-4	IEC 62631-2-1
Volume resistivity	7E12 / 4E9	Ohm*m	IEC 62631-3-1
Electric strength	35 / 34	kV/mm	IEC 60243-1
Comparative tracking index	400 / –	V	IEC 60112

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	

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