

# Durethan® BKV25H3.0

## PA6–GF25

25% 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)	0.3 / *	%	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	8500 / 5300	MPa	ISO 527–1/–2
Stress at break	160 / 95	MPa	ISO 527–1/–2
Strain at break	3.5 / 6	%	ISO 527–1/–2
Flexural modulus	8000 / 4400	MPa	ISO 178
Flexural strength	250 / 150	MPa	ISO 178
Charpy impact strength (+23°C)	65 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	55 / 50	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 15	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)	10 / <10	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)	200 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.3 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10

## Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
<b><i>ELECTRICAL PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Relative permittivity (100Hz)	5 / –	–	IEC 62631-2-1
Relative permittivity (1 MHz)	4 / –	–	IEC 62631-2-1
Dissipation factor (100 Hz)	420 / –	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	330 / –	E-4	IEC 62631-2-1
Electric strength	38 / 35	kV/mm	IEC 60243-1
Comparative tracking index	500 / –	V	IEC 60112
<b><i>OTHER PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Water absorption	7.5 / *	%	Sim. to ISO 62
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1320 / –	kg/m <sup>3</sup>	ISO 1183
<b><i>PROCESSING RECOMMENDATIONS</i></b>	<b><i>VALUE</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	