

Durethan® BKV60H3.0EF

PA6—GF60

60% Glass Reinforced, Injection Molding, Heat Stabilized, Improved flow

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.5 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	20000 / 12500	MPa	ISO 527-1/-2
Stress at break	230 / 158	MPa	ISO 527-1/-2
Strain at break	2.5 / 3.5	%	ISO 527-1/-2
Flexural modulus	20200 / 13500	MPa	ISO 178
Flexural strength	390 / 250	MPa	ISO 178
Charpy impact strength (+23°C)	95 / 95	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	95 / 95	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	17 / 24	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	17 / -	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	18 / 25	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	221 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	213 / *	°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)	0.1 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8 / *	E-4/°C	ISO 11359-1/-2
Glow Wire Flammability Index GWFI	700 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-12

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Glow Wire Flammability Index GWFI	725 / –	°C	IEC 60695–2–12
GWFI (Thickness (2) tested)	1.5 / –	mm	IEC 60695–2–12
Glow Wire Ignition Temperature GWIT	725 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	0.75 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	750 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	1.5 / –	mm	IEC 60695–2–13

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	4.3 / 8.71	–	IEC 62631–2–1
Relative permittivity (1 MHz)	5.07 / 4.68	–	IEC 62631–2–1
Dissipation factor (100 Hz)	0.02 / 0.1	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	0.03 / 0.06	E–4	IEC 62631–2–1
Volume resistivity	6.14E12 / 6.6E10	Ohm*m	IEC 62631–3–1
Surface resistivity	* / 2.64E14	Ohm	IEC 62631–3–2
Electric strength	28.6 / 25.8	kV/mm	IEC 60243–1
Comparative tracking index	600 / –	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Density	1710 / –	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	0.05–0.15	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–120	°C	