

Durethan® BKV30FN01

PA6–GF30 FR(40+72)

30% Glass Reinforced, Injection Molding, Flame Retardant (halogen free), Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.2 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10300 / 6700	MPa	ISO 527-1/-2
Stress at break	130 / 90	MPa	ISO 527-1/-2
Strain at break	3 / 6	%	ISO 527-1/-2
Flexural modulus	10400 / 6500	MPa	ISO 178
Flexural strength	230 / 140	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 60	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / <10	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	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>
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75 / –	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5 / –	mm	IEC 60695-2-12
<i>ELECTRICAL PROPERTIES</i>	<i>DRY / COND</i>		
Relative permittivity (100Hz)	4.2 / 8.8	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.7 / 4.2	–	IEC 62631-2-1
Dissipation factor (100 Hz)	160 / –	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	155 / –	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 7.1E10	Ohm*m	IEC 62631-3-1
Comparative tracking index	600 / –	V	IEC 60112
<i>OTHER PROPERTIES</i>	<i>DRY / COND</i>		
Water absorption	4.8 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1430 / –	kg/m³	ISO 1183
<i>PROCESSING RECOMMENDATIONS</i>	<i>VALUE</i>		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2-6	h	
Residual moisture content	0.03-0.07	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	250-270	°C	
Mold temperature	80-100	°C	