

Durethan® BKV20FN27

PA6—GX20 FR(30)

20% Glass Beads Reinforced, Injection Molding, Flame Retardant (halogen free), Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.6 / *	%	ISO 294-4
Molding shrinkage (normal)	0.6 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	5100 / 2100	MPa	ISO 527-1/-2
Stress at break	80 / 42	MPa	ISO 527-1/-2
Strain at break	3.5 / 30	%	ISO 527-1/-2
Flexural modulus	5000 / 2000	MPa	ISO 178
Flexural strength	140 / 60	MPa	ISO 178
Charpy impact strength (+23°C)	30 / 105	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / <10	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	<10 / <10	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	160 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.5 / *	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-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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
Glow Wire Ignition Temperature GWIT	700 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	0.75 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	700 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	1.5 / –	mm	IEC 60695–2–13

ELECTRICAL PROPERTIES	DRY / COND		
Comparative tracking index	525 / –	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	7.3 / *	%	Sim. to ISO 62
Humidity absorption	2.2 / *	%	Sim. to ISO 62
Density	1290 / –	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	0.03–0.07	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	250–270	°C	
Mold temperature	80–100	°C	