

Durethan® BG30XFN01

PA6—(GF+GB)30 FR(40+72)

Injection Molding, 30% Glass Fiber/Glass Beads, Flame Retardant (halogen free), Heat Stabilized, Improved flow, Excellent Surface Properties

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	7400 / 3500	MPa	ISO 527-1/-2
Stress at break	85 / 50	MPa	ISO 527-1/-2
Strain at break	3 / 7	%	ISO 527-1/-2
Flexural modulus	7000 / 3700	MPa	ISO 178
Flexural strength	145 / 90	MPa	ISO 178
Charpy impact strength (+23°C)	40 / 45	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 35	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 10	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°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)	190 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	214 / *	°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)	0.8 / *	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



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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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
Oxygen index	34.6 / *	%	ISO 4589-1/-2
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

ELECTRICAL PROPERTIES	DRY / COND		
Electric strength	32 / -	kV/mm	IEC 60243-1
Comparative tracking index	575 / -	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	5.3 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1390 / -	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	

