

Durethan® BKV30XWPXT

PA6—GF30

30% Glass Reinforced, Injection Molding, Heat Stabilized, Laser Weldable

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10000 / 5100	MPa	ISO 527-1/-2
Stress at break	170 / 90	MPa	ISO 527-1/-2
Strain at break	3.5 / 7.5	%	ISO 527-1/-2
Flexural modulus	8600 / 5000	MPa	ISO 178
Flexural strength	255 / 145	MPa	ISO 178
Tensile modulus (200°C)	2730	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	70 / 95	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	55 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 20	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	8 / 7	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	10 / 20	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	218 / *	°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)	216 / *	°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)	1 / *	E-4/°C	ISO 11359-1/-2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	DRY / COND		
Humidity absorption	2.7 / *	%	Sim. to ISO 62
Density	1370 / –	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	0.03–0.12	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	270–290	°C	
Mold temperature	80–120	°C	