

Durethan® BM40XH3.0EF

PA6—(GF+MD)40

40% Glass/Mineral Reinforced, Injection Molding, Heat Stabilized, Improved flow,
Excellent Surface Properties, Low Warpage

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.7 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	8500 / 4600	MPa	ISO 527-1/-2
Stress at break	125 / 65	MPa	ISO 527-1/-2
Strain at break	2.3 / 5.6	%	ISO 527-1/-2
Flexural modulus	8800 / 4800	MPa	ISO 178
Flexural strength	200 / 125	MPa	ISO 178
Charpy impact strength (+23°C)	35 / 55	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	35 / 45	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	3.5 / 5	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	2.5 / 2	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	4 / 5	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	219 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	196 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	217 / *	°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)	0.9 / *	E-4/°C	ISO 11359-1/-2

OTHER PROPERTIES

DRY / COND

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Water absorption	5.8 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1460 / –	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)	280–300	°C	
Mold temperature	80–100	°C	