

Durethan® BM240

PA6—MX40

40% Mineral Reinforced, Injection Molding, Low Warpage

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.85 / *	%	ISO 294-4
Molding shrinkage (normal)	0.85 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	5800 / 2200	MPa	ISO 527-1/-2
Stress at break	85 / 55	MPa	ISO 527-1/-2
Strain at break	10 / 40	%	ISO 527-1/-2
Flexural modulus	5500 / 2000	MPa	ISO 178
Flexural strength	150 / 65	MPa	ISO 178
Charpy impact strength (+23°C)	140 / N	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	80 / 80	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 12	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	<10 / <10	kJ/m²	ISO 179/1eA
Izod notched impact strength (-40°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)	90 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	190 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.6 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.7 / *	E-4/°C	ISO 11359-1/-2
Glow Wire Flammability Index GWFI	650 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	2 / -	mm	IEC 60695-2-12

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	DRY / COND		
Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1460 / –	kg/m³	ISO 1183
MATERIAL SPECIFIC PROPERTIES	DRY / COND		
Viscosity number	142 / *	cm³/g	ISO 307, 1157, 1628
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	