

Durethan® AM440H3.0

PA66—MX40

40% Mineral Reinforced, Injection Molding, Heat Stabilized, Low Warpage

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	1.3 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	6100 / 2700	MPa	ISO 527-1/-2
Stress at break	85 / 38	MPa	ISO 527-1/-2
Strain at break	2.5 / 10	%	ISO 527-1/-2
Flexural modulus	5800 / 2700	MPa	ISO 178
Flexural strength	140 / 70	MPa	ISO 178
Tensile modulus (200°C)	772	MPa	ISO 527-1/-2
Charpy impact strength (+23°C)	40 / 65	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	45 / 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)	265 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	110 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	230 / *	°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)	0.8 / *	E-4/°C	ISO 11359-1/-2



Durethan® AM440H3.0

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
ELECTRICAL PROPERTIES			
Comparative tracking index	600 / –	V	IEC 60112
OTHER PROPERTIES			
Water absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1490 / –	kg/m³	ISO 1183
PROCESSING RECOMMENDATIONS			
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	80–120	°C	

