

Durethan® B31SKH3.0

PA6

Injection Molding, Unreinforced, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.9 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	3700 / 1100	MPa	ISO 527-1/-2
Nominal strain at break	10 / >50	%	ISO 527-1/-2
Yield stress	90 / 55	MPa	ISO 527-1/-2
Yield strain	4 / 20	%	ISO 527-1/-2
Flexural modulus	3000 / 900	MPa	ISO 178
Flexural strength	120 / 40	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 25	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)	60 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	170 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.7 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.9 / *	E-4/°C	ISO 11359-1/-2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
OTHER PROPERTIES	DRY / COND		
Water absorption	10 / *	%	Sim. to ISO 62
Humidity absorption	3 / *	%	Sim. to ISO 62
Density	1140 / –	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)	260–280	°C	
Mold temperature	80–100	°C	