

Durethan® BC550Z

PA6—I

Blow Molding Grade, Unreinforced, Heat Stabilized, Improved Impact

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	1.5 / *	%	ISO 294-4
Molding shrinkage (normal)	1.5 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	2000 / 430	MPa	ISO 527-1/-2
Nominal strain at break	>50 / –	%	ISO 527-1/-2
Yield stress	50 / –	MPa	ISO 527-1/-2
Yield strain	4 / –	%	ISO 527-1/-2
Flexural modulus	1800 / 470	MPa	ISO 178
Flexural strength	66 / 21	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)	100 / 130	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	25 / 25	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	85 / 105	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)	53 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	1.4 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.3 / *	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	9.1 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1070 / –	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	0.00–0.06	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	230–280	°C	
Mold temperature	60–90	°C	