

Durethan® ECOBG60XXF

PA6—(GF+GB)60

Injection Molding, 60% Glass Fiber/Glass Beads, Heat Stabilized, Improved flow, Low Warpage, Recycled Content

Sustainability

Mass balanced
Recycled based

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.35 / *	%	ISO 294-4
Molding shrinkage (normal)	0.4 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	19000 / 12300	MPa	ISO 527-1/-2
Stress at break	210 / 135	MPa	ISO 527-1/-2
Strain at break	2.2 / 3.3	%	ISO 527-1/-2
Flexural modulus	18000 / 12000	MPa	ISO 178
Flexural strength	340 / 210	MPa	ISO 178
Charpy impact strength (+23°C)	85 / 75	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	75 / 70	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / 20	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	15 / 15	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	15 / 20	kJ/m²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	221 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	218 / *	°C	ISO 75-1/-2

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Coeff. of linear therm. expansion (parallel)	0.11 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.85 / *	E-4/°C	ISO 11359-1/-2

OTHER PROPERTIES	DRY / COND		
Density	1680 / –	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	0.05-0.15	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	270-290	°C	
Mold temperature	80-120	°C	