Property Data

Envalior
Imagine the Future

Durethan® BCF30XH2.0

PA6–(GF+CF)30

Injection Molding, 30% Glass Fiber/Carbon Fiber, Heat Stabilized, Electrical Conductive

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	DRY / COND		
Molding shrinkage (parallel)	0.22 / *	%	ISO 294–4
Molding shrinkage (normal)	0.77 / *	%	ISO 294–4
MECHANICAL PROPERTIES	DRY / COND		
Tensile modulus	13500 / 6700	MPa	ISO 527–1/–2
Stress at break	195 / 100	MPa	ISO 527–1/–2
Strain at break	3.1 / 5	%	ISO 527–1/–2
Flexural modulus	11500 / 6800	MPa	ISO 178
Flexural strength	280 / 160	MPa	ISO 178
Tensile modulus (200°C)	3700	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	75 / 80	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	60 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	11 / –	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	<10 / –	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	10 / –	kJ/m²	ISO 180/1A
THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	219 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.9 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695–11–10

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES	**DRY / COND**		
Volume resistivity	2000 / –	Ohm*m	IEC 62631-3-1
OTHER PROPERTIES	**DRY / COND**		
Density	1330 / –	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)	270-290	°C	
Mold temperature	80-120	°C	