

Durethan® ACF30XH2.0EF

PA66—(GF+CF)30

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

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.8 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	12000 / 7400	MPa	ISO 527-1/-2
Stress at break	170 / 110	MPa	ISO 527-1/-2
Strain at break	2.5 / 4.5	%	ISO 527-1/-2
Flexural modulus	11400 / 7000	MPa	ISO 178
Flexural strength	255 / 170	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 65	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	60 / 55	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	<10 / 15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	<10 / <10	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	10 / 15	kJ/m ²	ISO 180/1A
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	261 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	240 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.1 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1 / *	E-4/°C	ISO 11359-1/-2
ELECTRICAL PROPERTIES			
	DRY / COND		

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Volume resistivity	1000 / –	Ohm*m	IEC 62631–3–1
<i>OTHER PROPERTIES</i>			
	<i>DRY / COND</i>		
Water absorption	5 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1300 / –	kg/m ³	ISO 1183
<i>PROCESSING RECOMMENDATIONS</i>			
	<i>VALUE</i>		
Drying temperature dry air dryer	80	°C	
Drying time dry air dryer	2–6	h	
Residual moisture content	0.03–0.07	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	280–300	°C	
Mold temperature	80–120	°C	