LNP™ THERMOCOMP™ COMPOUND AC004

AC-1004

DESCRIPTION

LNP* THERMOCOMP* AC004 is a compound based on ABS resin containing 20% Carbon Fiber. Added feature of this material is: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20191216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	95	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	12960	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	131	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	10610	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	90	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Flexural Stress	152	MPa	ISO 178
Flexural Modulus, 2 mm/min	12750	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	320	J/m	ASTM D 4812
Izod Impact, notched, 23°C	64	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	16	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	213	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.03E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.15E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	105	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	101	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.14	-	ASTM D 792
Density	1.14	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.25	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.6	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+04	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05 – 0.1	%	
Melt Temperature	260	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	230 – 245	°C	
Rear - Zone 1 Temperature	205 – 215	°C	
Mold Temperature	70 – 80	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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