LNP™ THERMOCOMP™ COMPOUND AF004

AF-1004
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP AF004 is a compound based on ABS resin containing 20% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20190620

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	78	MPa	ASTM D 638
Tensile Strain, break	2.2	%	ASTM D 638
Tensile Modulus, 5 mm/min	6170	MPa	ASTM D 638
Flexural Stress	130	MPa	ASTM D 790
Flexural modulus	6150	MPa	ASTM D 790
Tensile Stress, break	76	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	6000	MPa	ISO 527
Flexural Stress	108	MPa	ISO 178
Flexural Modulus	5330	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	395	J/m	ASTM D 4812
Izod Impact, notched, 23°C	80	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	11	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	19	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	103	°C	ASTM D 648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	101	°C	ISO 75/Bf
Relative Temp Index, Elec [1]	60	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	60	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	60	°C	UL 746B
PHYSICAL [1]			
Density	1.19	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.24	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.24	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.4	%	ISO 294
Density	1.19	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.39	%	ISO 62

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101344693	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05 – 0.1	%	
Melt Temperature	260	°C	
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	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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