LNP™ THERMOCOMP™ COMPOUND DF004P

DF-1004 EP
REGION ASIA

DESCRIPTION

LNP THERMOCOMP* DF004P is a compound based on Polycarbonate resin containing 20% Glass Fiber. Added features of this material include: Exceptional Processing.

TYPICAL PROPERTY VALUES

Revision 20191031

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	43	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	106	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	10880	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	156	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6390	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	28	MPa	ISO 527
Tensile Stress, break, 5 mm/min	102	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	6200	MPa	ISO 527
Flexural Stress	202	MPa	ISO 178
Flexural Modulus, 2 mm/min	12540	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	725	J/m	ASTM D 4812
Izod Impact, notched, 23°C	91	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	47	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	138	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	95	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	97	°C	ISO 75/Af
Relative Temp Index, Elec [1]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	80	°C	UL 746B
PHYSICAL			
Density	1.34	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.5	%	ASTM D 955
Density	1.34	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.05	%	ISO 62

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-101358156	-	-
UL Recognized, 94V-0 Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-2 Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°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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