LNP™ THERMOCOMP™ COMPOUND WF007

WF-1007

DESCRIPTION

LNP THERMOCOMP WF007 is a compound based on PBT resin containing 35% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	121	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	121	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Modulus, 50 mm/min	16880	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	185	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	185	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9830	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	120	MPa	ISO 527
Tensile Stress, break, 5 mm/min	120	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2	%	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	11030	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	186	MPa	ISO 178
Flexural Modulus, 2 mm/min	9880	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	620	J/m	ASTM D 4812
Izod Impact, notched, 23°C	78	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	40	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	222	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	222	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Af
Relative Temp Index, Elec [1]	75	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	75	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	75	°C	UL 746B
PHYSICAL			
Density	1.6	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.2 – 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.9 – 2	%	ASTM D 955
Density	1.6	g/cm³	ISO 1183

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101284452	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°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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