LNP™ THERMOCOMP™ COMPOUND ZF004

ZF-1004
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP ZF004 is a compound based on PPO resin containing 20% Glass Fiber.

TYPICAL PROPERTY VALUES

Revision 20181231

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	80	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	6570	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	118	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6410	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	79	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	6350	MPa	ISO 527
Flexural Stress	121	MPa	ISO 178
Flexural Modulus, 2 mm/min	6270	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	390	J/m	ASTM D 4812
Izod Impact, notched, 23°C	69	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	12	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	31	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	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	131	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.83E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	5.36E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	133	°C	ISO 75/Af
PHYSICAL			
Density	1.22	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.09	%	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	1.22	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.09	%	ISO 62
INJECTION MOLDING			
Drying Temperature	120	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	4	hrs	
Melt Temperature	300 – 305	°C	
Front - Zone 3 Temperature	300 – 310	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	275 – 290	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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