



LNP™ THERMOCOMP™ Compound GF004

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound GF-1004

Product reorder name: GF004

LNP THERMOCOMP GF004 is a compound based on Polysulfone resin containing 20% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	930	kgf/cm ²	ASTM D 638
Tensile Stress, break	930	kgf/cm ²	ASTM D 638
Tensile Strain, yield	2.3	%	ASTM D 638
Tensile Strain, break	2.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	63200	kgf/cm ²	ASTM D 638
Flexural Stress	1400	kgf/cm ²	ASTM D 790
Flexural Modulus	63200	kgf/cm ²	ASTM D 790
Flexural Stress	145	MPa	ISO 178
Flexural Modulus	6000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	43	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	109	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	31	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	178	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	173	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.22E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.52E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	180	°C	ISO 75/Bf



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	174	°C	ISO 75/Af
PHYSICAL			
Density	1.41	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.64	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.85	%	ISO 294
Density	1.4	g/cm ³	ISO 1183



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	360 - 370	°C
Front - Zone 3 Temperature	350 - 360	°C
Middle - Zone 2 Temperature	340 - 350	°C
Rear - Zone 1 Temperature	325 - 340	°C
Mold Temperature	150	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm