



LNP™ THERMOCOMP™ Compound WF004

Americas: COMMERCIAL

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

Product reorder name: WF004

LNP THERMOCOMP WF004 is a compound based on PBT resin containing 20% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	1190	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D 638
Tensile Modulus, 50 mm/min	77300	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1860	kgf/cm ²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1850	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	72500	kgf/cm ²	ASTM D 790
Tensile Stress, break, 5 mm/min	114	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.4	%	ISO 527
Tensile Strain, break, 5 mm/min	2.4	%	ISO 527
Tensile Modulus, 1 mm/min	7590	MPa	ISO 527
Flexural Stress	173	MPa	ISO 178
Flexural Modulus, 2 mm/min	6660	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	61	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	6	cm-kgf/cm	ASTM D 256
Multiaxial Impact	19	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	72	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	35	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	222	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	207	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.9E-05	1/°C	ASTM D 696



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	1.02E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	218	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	198	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.47	-	ASTM D 792
Density	1.46	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
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