



LNP™ THERMOCOMP™ Compound NF001

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound PCA-F-1001

Product reorder name: NF001

LNP THERMOCOMP™ NF001 is a compound based on PC+ABS resin containing 5% Glass Fiber.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	640	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	490	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	6.2	%	ASTM D 638
Tensile Modulus, 50 mm/min	35400	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1040	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	32800	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	62	MPa	ISO 527
Tensile Stress, break, 5 mm/min	51	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.4	%	ISO 527
Tensile Strain, break, 5 mm/min	5.3	%	ISO 527
Tensile Modulus, 1 mm/min	3300	MPa	ISO 527
Flexural Stress	94	MPa	ISO 178
Flexural Modulus, 2 mm/min	3120	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	61	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	15	cm-kgf/cm	ASTM D 256
Multiaxial Impact	221	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	354	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	37	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	136	°C	ASTM D 648



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THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	123	°C	ASTM D 648
CTE, -30°C to 30°C, flow	5.28E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	8.21E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	134	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	120	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Density	1.18	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.17	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.25	%	ISO 62



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 270	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	250 - 260	°C
Rear - Zone 1 Temperature	230 - 245	°C
Mold Temperature	40 - 80	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm