LNP™ THERMOCOMP™ Compound JF002

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound JF-1002
Product reorder name: JF002

LNP THERMOCOMP™ JF002 is a compound based on Polyethersulfone resin containing 10% Glass Fiber.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1070	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1040	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	47700	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1790	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	44500	kgf/cm²	ASTM D 790
Tensile Stress, yield, 5 mm/min	103	MPa	ISO 527
Tensile Stress, break, 5 mm/min	102	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.3	%	ISO 527
Tensile Strain, break, 5 mm/min	5	%	ISO 527
Tensile Modulus, 1 mm/min	4420	MPa	ISO 527
Flexural Modulus, 2 mm/min	4060	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	85	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	54	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	220	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	214	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.71E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	4.41E+01	1/°C	ASTM D 696

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	221	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	212	°C	ISO 75/Af
PHYSICAL			
Density	1.45	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.51	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.5 - 0.7	%	ASTM D 955
Density	1.45	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.85	%	ISO 62

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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	355 - 370	°C
Front - Zone 3 Temperature	370 - 380	°C
Middle - Zone 2 Temperature	360 - 370	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	140 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm