



LNP™ THERMOTUF™ Compound WF002I

Americas: COMMERCIAL

Also known as: LNP™ THERMOTUF™ Compound WF-1002 HI

Product reorder name: WF002I

LNP THERMOTUF WF006I is a compound based on PBT resin containing 10% Glass Fiber. Added feature of this grade is: High Impact.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	650	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	560	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	4.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	38400	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	33800	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	62	MPa	ISO 527
Tensile Stress, break, 5 mm/min	60	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.4	%	ISO 527
Tensile Strain, break, 5 mm/min	4.3	%	ISO 527
Tensile Modulus, 1 mm/min	3670	MPa	ISO 527
Flexural Stress	102	MPa	ISO 178
Flexural Modulus, 2 mm/min	3270	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	72	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	12	cm-kgf/cm	ASTM D 256
Multiaxial Impact	17	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	67	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	39	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	214	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	178	°C	ASTM D 648
CTE, -30°C to 30°C, flow	7.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.11E-04	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	161	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.32	-	ASTM D 792
Density	1.32	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.07	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.1	%	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