

## LNP\* Thermocomp\* Compound 2F006

### Americas: COMMERCIAL

Also known as: LNP\* Thermocomp\* Compound FP-EF-1006

Product reorder name: 2F006

LNP\* 2F006 is a compound based on ETFE containing Glass Fibers.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	810	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	800	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.9	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.2	%	ASTM D 638
Tensile Modulus, 5 mm/min	91000	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1190	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	77900	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, yield, 5 mm/min	75	MPa	ISO 527
Tensile Stress, break, 5 mm/min	74	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.6	%	ISO 527
Tensile Strain, break, 5 mm/min	5	%	ISO 527
Tensile Modulus, 1 mm/min	8080	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	115	MPa	ISO 178
Flexural Modulus, 2 mm/min	7520	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	106	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	35	cm-kgf/cm	ASTM D 256
Multiaxial Impact	81	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	173	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	67	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	28	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	254	°C	ASTM D 648

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23±176.C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.  
 (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.  
 (4) Internal measurements according to UL standards.  
 (5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

Source GMD, last updated:

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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	215	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	246	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	187	°C	ISO 75/Af
<b>PHYSICAL</b>			
Specific Gravity	1.9	-	ASTM D 792
Density	1.91	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	2	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
Drying Temperature	70 - 80	°C
Drying Time	3 - 5	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	240 - 270	°C
Nozzle Temperature	240 - 270	°C
Front - Zone 3 Temperature	240 - 270	°C
Middle - Zone 2 Temperature	235 - 265	°C
Rear - Zone 1 Temperature	235 - 255	°C
Mold Temperature	50 - 70	°C
Screw Speed	20 - 100	rpm

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