



## LNP™ LUBRICOMP™ Compound EFL36

### Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound EFL-4036

Product reorder name: EFL36

LNP\* LUBRICOMP\* EFL36 is a compound based on Polyetherimide resin containing 30% Glass Fiber, 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, break	1790	kgf/cm <sup>2</sup>	ASTM D 638
Tensile Strain, break	2	%	ASTM D 638
Tensile Modulus, 50 mm/min	129300	kgf/cm <sup>2</sup>	ASTM D 638
Flexural Stress	2570	kgf/cm <sup>2</sup>	ASTM D 790
Flexural Modulus	115300	kgf/cm <sup>2</sup>	ASTM D 790
Tensile Stress, break	168	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	11180	MPa	ISO 527
Flexural Stress	248	MPa	ISO 178
Flexural Modulus	11390	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	72	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	12	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	105	cm-kgf	ASTM D 3763
Multiaxial Impact	37	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	46	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	202	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.96E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.98E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.84E-05	1/°C	ISO 11359-2

(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°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.

(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	Unit	Standard
<b>THERMAL</b>			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	204	°C	ISO 75/Af
<b>PHYSICAL</b>			
Density	1.62	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.15	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 - 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.21 - 0.24	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.47 - 0.35	%	ISO 294
Wear Factor Washer	35	10 <sup>-10</sup> in <sup>5</sup> -min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.45	-	ASTM D 3702 Modified: Manual
Static COF	0.43	-	ASTM D 3702 Modified: Manual
Density	1.62	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.22	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
<b>Injection Molding</b>		
Drying Temperature	120 - 150	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	360 - 365	°C
Front - Zone 3 Temperature	365 - 375	°C
Middle - Zone 2 Temperature	355 - 365	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

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