LNP™ LUBRICOMP™ Compound LFL36E

Americas: COMMERCIAL

Also known as: LNP™ LUBRICOMP™ Compound LFL-4036 EM
Product reorder name: LFL36E

LNP LUBRICOMP LFL36E is a compound based on Polyetheretherketone containing 30% Glass Fiber, 15% PTFE. Added features of this material are: Wear Resistant, Easy Molding.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1790	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1730	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2680	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	119300	kgf/cm²	ASTM D 790
Tensile Stress, break, 5 mm/min	177	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2	%	ISO 527
Tensile Modulus, 1 mm/min	12240	MPa	ISO 527
Flexural Modulus, 2 mm/min	11360	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	87	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	10	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	132	cm-kgf	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	339	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	327	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.8E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	3.6E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	337	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	322	°C	ISO 75/Af
PHYSICAL			
Density	1.64	g/cm³	ASTM D 792
Wear Factor Washer	64	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified

(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[1]	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Wear Factor Ring	9	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.49	-	ASTM D 3702 Modified
Static COF	0.73	-	ASTM D 3702 Modified

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	380 - 390	°C
Front - Zone 3 Temperature	380 - 395	°C
Middle - Zone 2 Temperature	365 - 375	°C
Rear - Zone 1 Temperature	350 - 360	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

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