LNP™ LUBRICOMP™ Compound ECL36

Americas: COMMERCIAL

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

Product reorder name: ECL36

LNP™ LUBRICOMP™ ECL36 is a compound based on Polyetherimide resin containing 30% Carbon Fiber, 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1820	kgf/cm²	ASTM D 638
Tensile Strain, break	1.7	%	ASTM D 638
Flexural Stress	2350	kgf/cm²	ASTM D 790
Flexural Modulus	195400	kgf/cm²	ASTM D 790
Tensile Stress, break	160	MPa	ISO 527
Tensile Strain, break	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	21600	MPa	ISO 527
Flexural Stress	210	MPa	ISO 178
Flexural Modulus	16000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	27	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	4	cm-kgf/cm	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	18	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D 648
PHYSICAL			
Density	1.48	g/cm³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.04	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.4	%	ASTM D 955
Wear Factor Washer	31	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.39	-	ASTM D 3702 Modified
Static COF	0.48	-	ASTM D 3702 Modified
Density	1.5	g/cm³	ISO 1183

(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
ELECTRICAL			
Surface Resistivity	1.E+01 - 1.E+06	Ohm	ASTM D 257

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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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