

Americas: COMMERCIAL

Also known as: LUBRICOMP IFL-4036 LEBK8-065 Product Reorder Name: IFL36L

LNP* Lubricomp* IFL36L is a compound based on Nylon 6/12 containing Glass Fiber and PTFE Lubricant. Characteristics of this grade are: Low Extractable.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	127	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	9400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	193	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	192	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	7910	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	124	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	8690	MPa	ISO 527
Flexural Stress	189	MPa	ISO 178
Flexural Modulus, 2 mm/min	7410	MPa	ISO 178
ІМРАСТ	Value	Unit	Standard
Izod Impact, unnotched, 23°C	849	J/m	ASTM D 4812
Izod Impact, notched, 23°C	103	J/m	ASTM D 256
Multiaxial Impact	2	J	ISO 6603
Instrumented Impact Total Energy, 23°C	8	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	48	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	213	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	197	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.1E+01	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	9.85E+01	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	211	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	195	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.44	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.13	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4 - 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 - 3	%	ASTM D 955
Wear Factor Washer	3	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	-1	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.61	-	ASTM D 3702 Modified
Static COF	0.59	-	ASTM D 3702 Modified
Density	1.43	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.18	%	ISO 62



Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	255 - 265	°C
Mold Temperature	65 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:2009/07/06

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(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.

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