

Asia Pacific: COMMERCIAL

LNP* Lubricomp* Compound GFL36L

Also known as: GFL-4036 LE Product Reorder Name: GFL36L

LNP* Lubricomp* GFL36L is a compound based on Polysulfone resin containing Glass Fiber, PTFE. Added features of this material include: Internally Lubricated, Low Extractible.

Property

TYPICAL PROPERTIES (1)				
MECHANICAL	Value	Unit	Standard	
Tensile Stress, yield	88	MPa	ASTM D 638	
Tensile Stress, break	88	MPa	ASTM D 638	
Tensile Strain, yield	1.3	%	ASTM D 638	
Tensile Strain, break	1.3	%	ASTM D 638	
Tensile Modulus, 50 mm/min	10340	MPa	ASTM D 638	
Flexural Stress	110	MPa	ASTM D 790	
Flexural Modulus	8960	MPa	ASTM D 790	
Tensile Stress, yield	87	MPa	ISO 527	
Tensile Stress, break	87	MPa	ISO 527	
Tensile Strain, yield	1.3	%	ISO 527	
Tensile Strain, break	1.2	%	ISO 527	
Tensile Modulus, 1 mm/min	9330	MPa	ISO 527	
Flexural Stress	121	MPa	ISO 178	
Flexural Modulus	9000	MPa	ISO 178	
IMPACT	Value	Unit	Standard	
Izod Impact, unnotched, 23°C	341	J/m	ASTM D 4812	
Izod Impact, notched, 23°C	74	J/m	ASTM D 256	
Instrumented Impact Energy @ peak, 23°C	14	J	ASTM D 3763	
Multiaxial Impact	3	J	ISO 6603	
Izod Impact, unnotched 80*10*4 +23°C	23	kJ/m²	ISO 180/1U	
Izod Impact, notched 80*10*4 +23°C	8	kJ/m²	ISO 180/1A	
THERMAL	Value	Unit	Standard	
HDT, 0.45 MPa, 3.2 mm, unannealed	185	°C	ASTM D 648	
HDT, 1.82 MPa, 3.2mm, unannealed	180	°C	ASTM D 648	
CTE, -40°C to 40°C, flow	3.06E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, xflow	2.52E-05	1/°C	ASTM E 831	
CTE, -40°C to 40°C, flow	3.E-05	1/°C	ISO 11359-2	
CTE, -40°C to 40°C, xflow	2.4E-05	1/°C	ISO 11359-2	
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	186	°C	ISO 75/Bf	
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	181	°C	ISO 75/Af	
PHYSICAL	Value	Unit	Standard	
Density	1.62	g/cm³	ASTM D 792	
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570	
Mold Shrinkage, flow, 24 hrs	0.2 - 0.4	%	ASTM D 955	
Mold Shrinkage, xflow, 24 hrs	0.4 - 0.6	%	ASTM D 955	
Mold Shrinkage, flow, 24 hrs	0.26	%	ISO 294	

Mold Shrinkage, xflow, 24 hrs	0.51	%	ISO 294
Wear Factor Washer	44	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.42	-	ASTM D 3702 Modified
Static COF	0.62	-	ASTM D 3702 Modified
Density	1.62	g/cm³	ISO 1183

Source GMD, last updated:09/24/2008

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.05	%
Melt Temperature	360 - 370	°C
Front - Zone 3 Temperature	350 - 360	°C
Middle - Zone 2 Temperature	340 - 350	°C
Rear - Zone 1 Temperature	325 - 340	°C
Mold Temperature	150	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:09/24/2008

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.

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