LNP™ LUBRICOMP™ COMPOUND GFL36L

GFL-4036 LE
REGION ASIA

DESCRIPTION

LNP* LUBRICOMP* GFL36L is a compound based on Polysulfone resin containing 30% Glass Fiber, 15% PTFE. Added features of this material include: Low Extractable, Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20181217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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			
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			
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			
Density	1.62	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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: Manual
Dynamic COF	0.42	-	ASTM D 3702 Modified: Manual
Static COF	0.62	-	ASTM D 3702 Modified: Manual
Density	1.62	g/cm³	ISO 1183
INJECTION MOLDING			
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	

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