LNP™ LUBRICOMP™ COMPOUND RFL36L

RFL-4036 LE
REGION ASIA

DESCRIPTION

LNP LUBRICOMP RFL36L is a compound based on Nylon 66 resin containing 30% Glass Fiber, 15% PTFE. Added features of this material include: Wear Resistant, Low Extractible.

TYPICAL PROPERTY VALUES

Revision 20181228

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	151	MPa	ASTM D 638
Tensile Stress, break	151	MPa	ASTM D 638
Tensile Strain, yield	2.8	%	ASTM D 638
Tensile Strain, break	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	10340	MPa	ASTM D 638
Flexural Stress	213	MPa	ASTM D 790
Flexural Modulus	8270	MPa	ASTM D 790
Tensile Stress, yield	152	MPa	ISO 527
Tensile Stress, break	152	MPa	ISO 527
Tensile Strain, yield	2.8	%	ISO 527
Tensile Strain, break	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	10050	MPa	ISO 527
Flexural Stress	230	MPa	ISO 178
Flexural Modulus	9300	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1009	J/m	ASTM D 4812
Izod Impact, notched, 23°C	96	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	12	J	ASTM D 3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	61	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	261	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	252	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.38E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.88E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	247	°C	ISO 75/Af
PHYSICAL			
Density	1.52	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.4	%	ASTM D 570

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.4 – 0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.3 – 1.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.53	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.4	%	ISO 294
Wear Factor Washer	4	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.66	-	ASTM D 3702 Modified: Manual
Static COF	0.65	-	ASTM D 3702 Modified: Manual
Density	1.52	g/cm³	ISO 1183
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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