LNP™ LUBRICOMP™ COMPOUND RFL36

RFL4036, PA 6.6
REGION ASIA

DESCRIPTION

LNP LUBRICOMP RFL36 is a compound based on Nylon 66 resin containing Glass Fiber, PTFE. Wear Resistant

TYPICAL PROPERTY VALUES

Revision 20200107

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	166	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Flexural Stress, yield, 2 mm/min	234	MPa	ISO 178
Flexural Stress, break, 2 mm/min	277	MPa	ISO 178
Flexural Strain, break, 2 mm/min	4.1	%	ISO 178
Flexural Modulus, 2 mm/min	7200	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	6.1	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	6.6	%	ISO 178
Flexural Strain, break, 2 mm/min, 150°C	5.6	%	ISO 178
Flexural Strain, break, 2 mm/min, 200°C	6.3	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	179	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	131	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 150°C	96	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 200°C	83	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	5300	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	4200	MPa	ISO 178
Flexural Modulus, 2 mm/min, 150°C	3500	MPa	ISO 178
Flexural Modulus, 2 mm/min, 200°C	3100	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*3 -40°C	12	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	84	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -40°C	74	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A
THERMAL			
Specific Heat	1988	J/kg-K	ASTM E 1269
CTE, 23°C to 60°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.5E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	>220	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	>220	°C	ISO 75/Af
Thermal Conductivity	0.25	W/m-K	ASTM D 5930
Relative Temp Index, Elec (1)	120	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	65	°C	UL 746B
Relative Temp Index, Mech w/o impact (1)	65	°C	UL 746B

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Mold Shrinkage, flow	0.2 – 0.5	%	SABIC method
Mold Shrinkage, xflow	0.8 – 1.2	%	SABIC method
Wear Factor Washer	12	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.59	-	ASTM D 3702 Modified: Manual
Density	1.51	g/cm³	ISO 1183
Water Absorption, 23°C/24hrs	1.34	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.46	%	ISO 62
Melt Volume Rate, MVR at 275°C/5 kg	15 – 20	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101282824	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
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	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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