LNP™ LUBRICOMP™ COMPOUND RFL36XXZ

RFL-4036
REGION ASIA

DESCRIPTION

LNP LUBRICOMP RFL36XXZ is a compound based on Nylon 66 resin containing 30% Glass Fiber, 15% PTFE. Added feature of this material is: Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20200108

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	139	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	11230	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	236	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9750	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	138	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	9800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	211	MPa	ISO 178
Flexural Modulus, 2 mm/min	9700	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	907	J/m	ASTM D 4812
Izod Impact, notched, 23°C	106	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	51	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	248	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.58E-05	1/°C	ASTM E 831
CTE, 23°C to 60°C, flow	3.78E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.5E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	248	°C	ISO 75/Af
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
PHYSICAL			
Mold Shrinkage, flow	0.2 – 0.5	%	SABIC method
Mold Shrinkage, xflow	0.8 – 1.2	%	SABIC method
Density	1.51	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.62	%	ASTM D 570
Dynamic COF	0.58	-	ASTM D 3702 Modified: Manual
Static COF	0.49	-	ASTM D 3702 Modified: Manual
Density	1.51	g/cm³	ISO 1183

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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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