

# LNPTM LUBRICOMPTM COMPOUND RBL36XXJ

RBL-4036 HC LE

## DESCRIPTION

LNP LUBRICOMP RBL36XXJ compound is based on Nylon 6/6 resin containing 30% glass bead, 15% PTFE. Added features of this grade include: Low Extractable, Healthcare, Wear Resistant, Food Contact compliant.

### GENERAL INFORMATION

Features	Low Warpage, Wear resistant, Food contact, Healthcare/Formula lock, Dimensional stability
Fillers	Glass Bead, PTFE
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

### INDUSTRY

### SUB INDUSTRY

Building and Construction	Water Management
Consumer	Home Appliances
Hygiene and Healthcare	Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing
Packaging	Industrial Packaging, Food & Beverage

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL<sup>(1)</sup></b>			
Tensile Stress, brk, Type I, 5 mm/min	64	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	8.5	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	10	%	ASTM D638
Tensile Modulus, 5 mm/min	3990	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	3740	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	64	MPa	ISO 527
Tensile Strain, break, 5 mm/min	8.3	%	ISO 527
Tensile Modulus, 1 mm/min	3930	MPa	ISO 527
Flexural Stress	107	MPa	ISO 178
Flexural Modulus, 2 mm/min	3560	MPa	ISO 178
<b>IMPACT<sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	435	J/m	ASTM D4812
Izod Impact, notched, 23°C	51	J/m	ASTM D256
Multiaxial Impact	1	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	5	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	27	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL<sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	236	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	83	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	6.90E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	8.30E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	203	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	73	°C	ISO 75/Af
<b>PHYSICAL<sup>(1)</sup></b>			
Specific Gravity	1.49	-	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.41	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	2 – 4	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	1 – 3	%	ASTM D955
Wear Factor Washer	41	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Wear Factor Ring	8	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.47	-	ASTM D3702 Modified: Manual
Static COF	0.44	-	ASTM D3702 Modified: Manual
Density	1.49	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.58	%	ISO 62
<b>INJECTION MOLDING<sup>(3)</sup></b>			
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	