

# LNPT<sup>TM</sup> LUBRICOMP<sup>TM</sup> COMPOUND RFN16

RFL-4216

REGION EUROPE

## DESCRIPTION

LNP LUBRICOMP RFN16 compound is based on Nylon 6/6 resin containing 30% glass fiber and Molybdenum diSulfide (MoS<sub>2</sub>). Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber, Molybdenum
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield, 5 mm/min	168	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.1	%	ISO 527
Tensile Modulus, 1 mm/min	9100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	237	MPa	ISO 178
Flexural Modulus, 2 mm/min	8900	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	50	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.2E-04	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	249	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	0.2 – 0.5	%	SABIC method
Wear Factor Washer	62	10 <sup>-8</sup> -10 <sup>-5</sup> in <sup>3</sup> -min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.4	-	ASTM D3702 Modified: Instr.
Static COF	0.71	-	ASTM D3702 Modified: Instr.
Density	1.4	g/cm <sup>3</sup>	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Water Absorption, (23°C/24hrs)	0.65	%	ISO 62-1
<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	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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