

# LNPT<sup>TM</sup> LUBRICOMP<sup>TM</sup> COMPOUND OCP36

O-BG  
REGION AMERICAS

## DESCRIPTION

LNP LUBRICOMP OCP36 compound is based on Polyphenylene Sulfide (PPS) - linear resin containing 30% carbon fiber and 15% PTFE/silicone. Added features of this grade include: Wear Resistant, Bearing Grade, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Wear resistant, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber, PTFE/Silicone
Polymer Types	Polyphenylene Sulfide, Linear (PPS, Linear)
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, brk, Type I, 5 mm/min	165	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	0.9	%	ASTM D638
Tensile Modulus, 5 mm/min	26120	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	253	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	21400	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	166	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.9	%	ISO 527
Tensile Modulus, 1 mm/min	24890	MPa	ISO 527
Flexural Stress	254	MPa	ISO 178
Flexural Modulus, 2 mm/min	22240	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	485	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	26	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	279	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	260	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	278	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	266	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	130	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	130	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	130	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.51	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.02	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>	0.2 – 0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>	0.4 – 0.6	%	ASTM D955
Wear Factor Washer	24	10 <sup>-4</sup> -10 <sup>-5</sup> in <sup>3</sup> -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.47	-	ASTM D3702 Modified: Manual
Static COF	0.33	-	ASTM D3702 Modified: Manual
Density	1.54	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity	1.E+02	Ω	ASTM D257
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-101284446</a>	-	-
UL Recognized, 94V-0 Flame Class Rating	0.94	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Melt Temperature	315 – 320	°C	
Front - Zone 3 Temperature	330 – 345	°C	
Middle - Zone 2 Temperature	320 – 330	°C	
Rear - Zone 1 Temperature	305 – 315	°C	
Mold Temperature	140 – 165	°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) 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.
- (3) 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.
- (4) 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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