

# LNPT<sup>TM</sup> LUBRICOMP<sup>TM</sup> COMPOUND DFL36

DFL-4036

REGION EUROPE

## DESCRIPTION

LNP LUBRICOMP DFL36 compound is based on Polycarbonate (PC) resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High stiffness/Strength
Fillers	Glass Fiber, PTFE
Polymer Types	Polycarbonate (PC)
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, break, 5 mm/min	120	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.7	%	ISO 527
Flexural Stress, yield, 2 mm/min	199	MPa	ISO 178
Flexural Strain, break, 2 mm/min	3.1	%	ISO 178
Flexural Modulus, 2 mm/min	8600	MPa	ISO 178
Flexural Strain, break, 2 mm/min, 60°C	3.1	%	ISO 178
Flexural Strain, break, 2 mm/min, 100°C	3.5	%	ISO 178
Flexural Strain, break, 2 mm/min, 120°C	3.8	%	ISO 178
Flexural Stress, yield, 2 mm/min, 60°C	172	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 100°C	136	MPa	ISO 178
Flexural Stress, yield, 2 mm/min, 120°C	114	MPa	ISO 178
Flexural Modulus, 2 mm/min, 60°C	8400	MPa	ISO 178
Flexural Modulus, 2 mm/min, 100°C	8100	MPa	ISO 178
Flexural Modulus, 2 mm/min, 120°C	7500	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	55	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	2.4E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, 23°C to 60°C, xflow	7.6E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	130	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage on Tensile Bar, flow <sup>(2)</sup>	0.1 – 0.3	%	SABIC method
Wear Factor Washer	22	10 <sup>-4</sup> in <sup>3</sup> -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.46	-	ASTM D3702 Modified: Manual
Static COF	0.41	-	ASTM D3702 Modified: Manual
Density	1.54	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	8 – 12	cm <sup>3</sup> /10 min	ISO 1133
<b>FLAME CHARACTERISTICS <sup>(3)</sup></b>			
UL Yellow Card Link	<a href="#">E45329-101344594</a>	-	-
UL Recognized, 94V-1 Flame Class Rating	≥3	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 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) 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.
- (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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