

# LNPT<sup>TM</sup> LUBRICOMP<sup>TM</sup> COMPOUND WI001

WL-4410

REGION EUROPE

## DESCRIPTION

LNP LUBRICOMP WI001 compound is based on Polybutylene Terephthalate (PBT) resin containing 2% silicone. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, No PFAS intentionally added
Fillers	Unreinforced, Silicone
Polymer Types	Polybutylene Terephthalate (PBT)
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	45	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	69	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	1.19E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.31E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	115	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	66	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	75	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	75	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	75	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>	1.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>	1.3	%	ISO 294

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.3	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/24hrs)	0.09	%	ISO 62-1
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="#">E45329-101284326</a>	-	-
UL Recognized, 94HB Flame Class Rating	1.5	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°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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