

# LNPT<sup>™</sup> LUBRICOMP<sup>™</sup> COMPOUND WFI14

WFI14

## DESCRIPTION

LNP LUBRICOMP WFI14 compound is based on Polybutylene Terephthalate (PBT) resin containing 20% glass fiber and silicone. Added features of this grade include: Internally lubricated, Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Glass Fiber, 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	98	MPa	ISO 527
Tensile Stress, break, 5 mm/min	99	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.1	%	ISO 527
Tensile Strain, break, 5 mm/min	4.3	%	ISO 527
Tensile Modulus, 1 mm/min	6700	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	126	MPa	ISO 178
Flexural Stress, break, 2 mm/min	149	MPa	ISO 178
Flexural Strain, break, 2 mm/min	4.3	%	ISO 178
Flexural Modulus, 2 mm/min	5600	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	13	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	3.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.3E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	217	°C	ISO 75/Bf
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	0.3 – 0.5	%	SABIC method
Wear Factor Washer	113	10 <sup>-4</sup> in <sup>3</sup> -min/ft-lb-hr	ASTM D3702 Modified: Instr.
Dynamic COF	0.36	-	ASTM D3702 Modified: Instr.

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Static COF	0.73	-	ASTM D3702 Modified: Instr.
Density	1.43	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/24hrs)	0.1	%	ISO 62-1
<b>INJECTION MOLDING <sup>(3)</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) 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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