

# LNPT<sup>™</sup> LUBRICOMP<sup>™</sup> COMPOUND GL003

GL-4030

REGION AMERICAS

## DESCRIPTION

LNP LUBRICOMP GL003 compound is based on Polysulfone (PSU) resin containing 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant, High temperature resistance
Fillers	Unreinforced, PTFE
Polymer Types	Polysulfone (PSU)
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 20231204

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	55	MPa	ASTM D638
Tensile Strain, break	9.9	%	ASTM D638
Flexural Stress	75	MPa	ASTM D790
Flexural Modulus	2060	MPa	ASTM D790
Tensile Stress, break	55	MPa	ISO 527
Tensile Strain, break	11.8	%	ISO 527
Flexural Stress	78	MPa	ISO 178
Flexural Modulus	2300	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	891	J/m	ASTM D4812
Izod Impact, notched, 23°C	58	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	70	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>			
HDT, 0.45 MPa, 3.2 mm, unannealed	178	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	170	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	179	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	175	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Density	1.31	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.7 – 0.9	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.7 – 0.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.76	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.83	%	ISO 294
Wear Factor Washer	24	10 <sup>4</sup> -10 in <sup>4</sup> -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.23	-	ASTM D3702 Modified: Manual
Static COF	0.12	-	ASTM D3702 Modified: Manual
Density	1.31	g/cm <sup>3</sup>	ISO 1183
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	360 – 370	°C	
Front - Zone 3 Temperature	350 – 360	°C	
Middle - Zone 2 Temperature	340 – 350	°C	
Rear - Zone 1 Temperature	325 – 340	°C	
Mold Temperature	150	°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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