

# LNPT<sup>™</sup> LUBRICOMP<sup>™</sup> COMPOUND OL003A

OL-4030

## DESCRIPTION

LNP LUBRICOMP OL003A compound is based on Polyphenylene Sulfide (PPS) - branched resin containing 15% PTFE. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced, PTFE
Polymer Types	Polyphenylene Sulfide, Branched (PPS, Branched)
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	21	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	0.6	%	ASTM D638
Tensile Modulus, 5 mm/min	3590	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	65	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3870	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	20	MPa	ISO 527
Tensile Strain, break, 5 mm/min	0.6	%	ISO 527
Tensile Modulus, 1 mm/min	3360	MPa	ISO 527
Flexural Strength, 2 mm/min	56	MPa	ISO 178
Flexural Modulus, 2 mm/min	3320	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	74	J/m	ASTM D4812
Izod Impact, notched, 23°C	13	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	1	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	2	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	175	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D648
CTE, -30°C to 30°C, flow	6.E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	6.6E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	178	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	109	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	1.44	-	ASTM D792
Density	1.43	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>(2)</sup>	0.9 – 2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	1 – 3	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
<b>INJECTION MOLDING <sup>(3)</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) 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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