

## LNPTM LUBRICOMPTM COMPOUND 0X97635

PDX-O-97635

## **DESCRIPTION**

LNP LUBRICOMP OX97635 compound is based on Polyphenylene Sulfide (PPS) resin containing carbon fiber and PTFE. Added features of this grade include: Electrically Conductive, Wear Resistant.

GENERAL INFORMATION	
Features	Electrically Conductive, Wear resistant
Fillers	Carbon Fiber, 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
MECHANICAL (1)			
Tensile Stress, break	121	MPa	ASTM D638
Tensile Strain, break	0.8	%	ASTM D638
Tensile Modulus, 50 mm/min	22950	MPa	ASTM D638
Flexural Stress	253	MPa	ASTM D790
Flexural Modulus	24540	MPa	ASTM D790
Tensile Stress, break	165	MPa	ISO 527
Tensile Strain, break	0.8	%	ISO 527
Tensile Modulus, 1 mm/min	26200	MPa	ISO 527
Flexural Stress	259	MPa	ISO 178
Flexural Modulus	25940	MPa	ISO 178
IMPACT (1)			
Izod Impact, unnotched, 23°C	395	J/m	ASTM D4812
Izod Impact, notched, 23°C	48	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	4	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	24	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL (1)			
HDT, 1.82 MPa, 3.2mm, unannealed	269	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	265	°C	ISO 75/Af



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL (1)			
Density	1.55	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.02	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.1	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.06	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.44	%	ISO 294
Wear Factor Washer	47	10^-10 in^5-min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.36	-	ASTM D3702 Modified: Manual
Static COF	0.31	-	ASTM D3702 Modified: Manual
Density	1.55	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62
INJECTION MOLDING (3)			
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	

<sup>(1)</sup> 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.

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<sup>(2)</sup> 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.

<sup>(3)</sup> 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.