

# LNPTM THERMOCOMPTM COMPOUND LC004XXP

LC-1004 NAT

## DESCRIPTION

LNP THERMOCOMP LC004XXP compound is based on Polyetheretherketone (PEEK) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yield, 5 mm/min	199	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Flexural Stress, yield, 2 mm/min	280	MPa	ISO 178
Flexural Modulus, 2 mm/min	13900	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m <sup>2</sup>	ISO 180/1A
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	0.1 – 0.3	%	SABIC method
Density	1.36	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity	1.E+02 – 1.E+04	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	380 – 390	°C	
Front - Zone 3 Temperature	380 – 395	°C	
Middle - Zone 2 Temperature	365 – 375	°C	
Rear - Zone 1 Temperature	350 – 360	°C	
Mold Temperature	140 – 165	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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