

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND OC006

OC-1006

REGION EUROPE

## DESCRIPTION

LNP THERMOCOMP OC006 compound is based on linear Polyphenylene Sulfide (PPS) resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyphenylene Sulfide, Linear (PPS, Linear)
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, break, 5 mm/min	213	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1	%	ISO 527
Tensile Modulus, 1 mm/min	26600	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	298	MPa	ISO 178
Flexural Modulus, 2 mm/min	22500	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched 80*10*4 +23°C	30	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>			
CTE, 23°C to 60°C, flow	6.E-06	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	4.6E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	280	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	267	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	130	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	130	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	130	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(3)</sup>	0.1	%	SABIC method
Density	1.42	g/cm <sup>3</sup>	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>ELECTRICAL</b>			
Volume Resistivity	1.E+04 – 1.E+06	Ω.cm	ASTM D257
Surface Resistivity	1.E+02 – 1.E+03	Ω	ASTM D257
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="#">E45329-101344679</a>	-	-
UL Recognized, 94V-0 Flame Class Rating	1	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (3) 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.
- (4) 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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