

LNPTTM THERMOCOMPTM COMPOUND LC006

LC-1006

REGION EUROPE

DESCRIPTION

LNP THERMOCOMP LC006 compound is based on Polyetheretherketone (PEEK) resin containing 30% 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
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	219	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	24050	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	301	MPa	ISO 178
Flexural Modulus, 2 mm/min	17000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	44	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	6.9E-06	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	4.2E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	300	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Mold Shrinkage, flow ⁽²⁾	0.1 – 0.3	%	SABIC method
Density	1.4	g/cm ³	ISO 1183
ELECTRICAL ⁽¹⁾			
Volume Resistivity	1.E+04 – 1E+04	Ω.cm	ASTM D257
Surface Resistivity	1.E+04 – 1.E+06	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽³⁾			
UL Yellow Card Link	E45329-101284425	-	-

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94V-0 Flame Class Rating	0.77	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			
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	
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) 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.
- (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.

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