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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
MECHANICAL (1)			
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
IMPACT (1)			
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
PHYSICAL (1)			
Mold Shrinkage, flow ⁽²⁾	0.1 – 0.3	%	SABIC method
Density	1.36	g/cm³	ISO 1183
ELECTRICAL (1)			
	15.03 15.04	6	
Surface Resistivity	1.E+02 – 1.E+04	Ω	ASTM D257
INJECTION MOLDING (3)	1.E+U2 - 1.E+U4	Ω	ASTM D257
	120 – 150	°C	ASTM D257
INJECTION MOLDING (3)			ASTM D257
INJECTION MOLDING ⁽³⁾ Drying Temperature	120 – 150	°C	ASTM D257
INJECTION MOLDING ⁽³⁾ Drying Temperature Drying Time	120 – 150 4	°C Hrs	ASTM D257
INJECTION MOLDING (3) Drying Temperature Drying Time Maximum Moisture Content	120 – 150 4 0.1	°C Hrs	ASTM D257
INJECTION MOLDING ⁽³⁾ Drying Temperature Drying Time Maximum Moisture Content Melt Temperature	120 – 150 4 0.1 380 – 390	°C Hrs % °C	ASTM D257
INJECTION MOLDING (3) Drying Temperature Drying Time Maximum Moisture Content Melt Temperature Front - Zone 3 Temperature	120 - 150 4 0.1 380 - 390 380 - 395	°C Hrs % °C	ASTM D257

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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.

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