

# LNPTM THERMOCOMPTM COMPOUND LF002XXP-WT02005

LF-1002 WT-020-05

## DESCRIPTION

LNP THERMOCOMP LF002XXP-WT02005 compound is based on Polyetheretherketone (PEEK) resin containing 10% glass fiber. Added features of this grade include: Custom Color.

GENERAL INFORMATION	
Features	High stiffness/Strength, High temperature resistance
Fillers	Glass Fiber
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Consumer	Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

## TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break, 5 mm/min	110	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	8550	MPa	ISO 527
Flexural Stress, break, 2 mm/min	170	MPa	ISO 178
Flexural Modulus, 2 mm/min	7500	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	5	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
CTE, 23°C to 60°C, flow	2.8E-05	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	179	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(2)</sup>	0.4 – 0.6	%	SABIC method
Density	1.88	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/24hrs)	0.04	%	ISO 62-1
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120 – 150	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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) 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.