

**Product Texts**

LNP THERMOCOMP EC005 compound is based on Polyetherimide (PEI) resin containing 25% carbon fiber. Added features of this grade include: Electrically Conductive.

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.08	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.6	mm/mm	ASTM D 955

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	18200	MPa	ISO 527
Stress at break	200	MPa	ISO 527
Strain at break	1.4	%	ISO 527
Flexural modulus	16200	MPa	ISO 178
Izod impact strength, +23°C, 4mm	24	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	18300	MPa	ASTM D 638
Tensile Strength at Break	200	MPa	ASTM D 638
Elongation at Break	1.4	%	ASTM D 638
Flexural Modulus	16300	MPa	ASTM D 790
Izod Impact notched, 1/8 in	45	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	430	J/m	ASTM D 256

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	207	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	212	°C	ISO 75-1/-2
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	20.5	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	27.2	E-6/K	ASTM D 696
DTUL @ 66 psi	210	°C	ASTM D 648
DTUL @ 264 psi	206	°C	ASTM D 648

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Surface Resistivity	100000	Ohm	ASTM D 257
Volume Resistivity	1000000	Ohm*cm	ASTM D 257

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Humidity absorption	0.27	%	Sim. to ISO 62
Density	1370	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	0.17	%	ASTM D 570
Density	1380	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	360 - 400	°C	-
Mold temperature	120 - 150	°C	-
Zone 1	360 - 380	°C	-
Zone 2	370 - 390	°C	-
Zone 3	380 - 400	°C	-

Back pressure

**0.3 - 0.7**

MPa

-

**Characteristics****Processing**

Injection Molding

**Applications**

Automotive

**Special Characteristics**

Increased electrical conductivity

**Regional Availability**

North America