

Product Texts

LNP THERMOCOMP LC003E compound is based on Polyetheretherketone (PEEK) resin containing 15% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.25	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.55	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10500	MPa	ISO 527
Stress at break	163	MPa	ISO 527
Strain at break	1.8	%	ISO 527
Flexural modulus	9850	MPa	ISO 178
Flexural strength	263	MPa	ISO 178
Izod impact strength, +23°C, 4mm	29	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	11510	MPa	ASTM D 638
Tensile Strength at Break	153	MPa	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	9510	MPa	ASTM D 790
Flexural Strength	259	MPa	ASTM D 790
Izod Impact notched, 1/8 in	37	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	400	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	298	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	270	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	1E7	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.13	%	Sim. to ISO 62
Density	1330	kg/m ³	ISO 1183
Water Absorption, 24hr	0.07	%	ASTM D 570
Density	1330	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Mold temperature	175 - 190	°C	-
Zone 1	370 - 380	°C	-
Zone 2	380 - 400	°C	-
Zone 3	380 - 400	°C	-
Screw speed	60 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America

Special Characteristics

Increased electrical conductivity