

Product Texts

LNP THERMOCOMP LC008E compound is based on Polyetheretherketone (PEEK) resin containing 40% carbon fiber. Added features of this grade include: Easy Molding, Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.1	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.2	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.7	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	30500	MPa	ISO 527
Stress at break	242	MPa	ISO 527
Strain at break	1.3	%	ISO 527
Flexural modulus	27500	MPa	ISO 178
Flexural strength	352	MPa	ISO 178
Izod impact strength, +23°C, 4mm	40	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	33090	MPa	ASTM D 638
Tensile Strength at Break	240	MPa	ASTM D 638
Elongation at Break	1.3	%	ASTM D 638
Flexural Modulus	26880	MPa	ASTM D 790
Flexural Strength	365	MPa	ASTM D 790
Izod Impact notched, 1/8 in	58	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	704	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	326	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	338	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 66 psi	338	°C	ASTM D 648
DTUL @ 264 psi	322	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Density	1470	kg/m ³	ISO 1183
Density	1470	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 150	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.1	%	-
Melt temperature	380 - 390	°C	-
Mold temperature	140 - 165	°C	-
Zone 1	350 - 360	°C	-
Zone 2	365 - 375	°C	-
Zone 3	380 - 395	°C	-
Screw speed	60 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

Asia Pacific

Special Characteristics

Increased electrical conductivity