

Product Texts

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

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

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11700	MPa	ISO 527
Stress at break	194	MPa	ISO 527
Strain at break	2.1	%	ISO 527
Flexural modulus	15000	MPa	ISO 178
Flexural strength	276	MPa	ISO 178
Izod impact strength, +23°C, 4mm	29	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	6	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	12330	MPa	ASTM D 638
Tensile Strength at Break	200	MPa	ASTM D 638
Elongation at Break	2.1	%	ASTM D 638
Flexural Modulus	14320	MPa	ASTM D 790
Flexural Strength	277	MPa	ASTM D 790
Izod Impact notched, 1/8 in	53	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	430	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	206	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	206	°C	ASTM D 648

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

Other properties	Value	Unit	Test Standard
Humidity absorption	0.23	%	Sim. to ISO 62
Density	1370	kg/m ³	ISO 1183
Water Absorption, 24hr	0.17	%	ASTM D 570
Density	1360	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	-
Processing humidity	≤0.02	%	-
Melt temperature	360 - 400	°C	-
Mold temperature	140 - 180	°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

Asia Pacific