

**Product Texts**

LNP THERMOCOMP AC004 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.2	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.45	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Stress at break	90	MPa	ISO 527
Strain at break	2.3	%	ISO 527
Flexural modulus	12800	MPa	ISO 178
Flexural strength	152	MPa	ISO 178
Izod impact strength, +23°C, 4mm	16	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	6	kJ/m <sup>2</sup>	ISO 180/1A

<b>ASTM Data</b>			
Tensile Modulus	12960	MPa	ASTM D 638
Tensile Strength at Break	95	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	10610	MPa	ASTM D 790
Izod Impact notched, 1/8 in	64	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	320	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	101	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	105	°C	ISO 75-1/-2
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	20	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	72	E-6/K	ASTM D 696
DTUL @ 264 psi	100	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Surface Resistivity	10000	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.25	%	Sim. to ISO 62
Water Absorption, 24hr	0.25	%	ASTM D 570
Density	1140	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.1	%	-
Melt temperature	260	°C	-
Mold temperature	70 - 80	°C	-
Zone 1	205 - 215	°C	-
Zone 2	230 - 245	°C	-
Zone 3	265 - 275	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Regional Availability**

North America, Europe, Asia Pacific

**Special Characteristics**

Increased electrical conductivity