

**Product Texts**

LNP THERMOCOMP DC0049XF compound is based on Polycarbonate (PC) resin containing 20% carbon fiber. Added features of this grade include: Electrically Conductive, Flame Retardant.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.4	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.5	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	13000	MPa	ISO 527
Stress at break	133	MPa	ISO 527
Strain at break	1.5	%	ISO 527
Flexural modulus	10500	MPa	ISO 178
Izod impact strength, +23°C, 4mm	26	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	5	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	12640	MPa	ASTM D 638
Tensile Strength at Break	132	MPa	ASTM D 638
Elongation at Break	2.1	%	ASTM D 638
Flexural Modulus	11070	MPa	ASTM D 790
Izod Impact notched, 1/8 in	58	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	462	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	139	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	143	°C	ISO 75-1/-2
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	1	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	7.99	E-6/K	ASTM D 696
DTUL @ 66 psi	143	°C	ASTM D 648
DTUL @ 264 psi	140	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.13	%	Sim. to ISO 62
Water Absorption, 24hr	0.08	%	ASTM D 570
Density	1310	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	305 - 325	°C	-
Mold temperature	80 - 110	°C	-
Zone 1	295 - 305	°C	-
Zone 2	310 - 320	°C	-
Zone 3	320 - 330	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Increased electrical conductivity, Flame retardant

**Additives**

Flame retarding agent

**Regional Availability**

North America, Europe, Asia Pacific