

Product Texts

LNP THERMOCOMP RC006XXH compound is based on Nylon 6/6 resin containing 30% carbon fiber. Added features of this grade include: Electrically Conductive, Healthcare.

Processing/Physical Characteristics	Value	Unit	Test Standard
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	24800	MPa	ISO 527
Stress at break	267	MPa	ISO 527
Strain at break	2.1	%	ISO 527
Flexural modulus	19000	MPa	ISO 178
Flexural strength	364	MPa	ISO 178
Izod impact strength, +23°C, 4mm	64	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	11	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	25200	MPa	ASTM D 638
Tensile Strength at Break	269	MPa	ASTM D 638
Elongation at Break	2.1	%	ASTM D 638
Flexural Modulus	20300	MPa	ASTM D 790
Izod Impact notched, 1/8 in	102	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	1080	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	257	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	261	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	15	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	63	E-6/K	ASTM D 696
DTUL @ 66 psi	262	°C	ASTM D 648
DTUL @ 264 psi	257	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	1	%	Sim. to ISO 62
Water Absorption, 24hr	0.7	%	ASTM D 570
Density	1270	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.25	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	95 - 110	°C	-
Zone 1	265 - 275	°C	-
Zone 2	280 - 295	°C	-
Zone 3	295 - 305	°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