

Product Texts

LNP THERMOCOMP IF004 compound is based on Nylon 6/12 resin containing 20% glass fiber.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.4	mm/mm	ASTM D 955
Mold Shrinkage, TD	2	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6790	MPa	ISO 527
Stress at break	119	MPa	ISO 527
Strain at break	2.6	%	ISO 527
Flexural modulus	5720	MPa	ISO 178
Flexural strength	173	MPa	ISO 178
Izod impact strength, +23°C, 4mm	27	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	6	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	6830	MPa	ASTM D 638
Tensile Strength at Break	118	MPa	ASTM D 638
Elongation at Break	2.7	%	ASTM D 638
Flexural Modulus	6080	MPa	ASTM D 790
Izod Impact notched, 1/8 in	63	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	447	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	188	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	209	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	40	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	101	E-6/K	ASTM D 696
DTUL @ 66 psi	213	°C	ASTM D 648
DTUL @ 264 psi	196	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.28	%	Sim. to ISO 62
Water Absorption, 24hr	0.21	%	ASTM D 570
Density	1220	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	≤0.2	%	-
Melt temperature	270 - 275	°C	-
Mold temperature	65 - 95	°C	-
Zone 1	255 - 265	°C	-
Zone 2	260 - 270	°C	-
Zone 3	270 - 280	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America