

Product Texts

LNP THERMOCOMP FF004 is a compound based on Polyethylene (PE) resin containing 20% Glass Fiber.

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3420	MPa	ISO 527
Yield stress	37	MPa	ISO 527
Yield strain	2.5	%	ISO 527
Stress at break	31	MPa	ISO 527
Strain at break	4.2	%	ISO 527
Flexural modulus, 23°C	2840	MPa	ISO 178
Flexural strength	51	MPa	ISO 178
Izod impact strength, +23°C	17	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	5	kJ/m ²	ISO 180/1A

ASTM Data

Tensile Modulus	4210	MPa	ASTM D 638
Tensile Strength at Yield	40	MPa	ASTM D 638
Tensile Strength at Break	40	MPa	ASTM D 638
Elongation at Yield	3	%	ASTM D 638
Elongation at Break	4.3	%	ASTM D 638
Flexural Modulus	2410	MPa	ASTM D 790
Flexural Strength	48	MPa	ASTM D 790
Izod Impact notched, 1/8 in	65	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	337	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
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ISO Data

Temp. of deflection under load, 1.80 MPa	92	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	121	°C	ISO 75-1/-2

ASTM Data

Coefficient of Thermal Expansion, MD	56	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	123	E-6/K	ASTM D 696
DTUL @ 66 psi	126	°C	ASTM D 648
DTUL @ 264 psi	102	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
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Humidity absorption	0.01	%	Sim. to ISO 62
Water Absorption, 24hr	0.02	%	ASTM D 570
Density	1080	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
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Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	230	°C	-
Mold temperature	40 - 55	°C	-
Zone 1	195 - 205	°C	-
Zone 2	210 - 220	°C	-
Zone 3	220 - 230	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific, South and Central America

Applications

Medical, Sports Equipment