

Product Texts

LNP THERMOCOMP IF003 compound is based on Nylon 6/12 resin containing 15% glass fiber.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.5	mm/mm	ASTM D 955
Mold Shrinkage, TD	1.1	mm/mm	ASTM D 955

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	5430	MPa	ISO 527
Stress at break	99	MPa	ISO 527
Strain at break	2.1	%	ISO 527
Flexural modulus	4590	MPa	ISO 178
Flexural strength	156	MPa	ISO 178
Izod impact strength, +23°C, 4mm	22	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	4	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	5530	MPa	ASTM D 638
Tensile Strength at Break	100	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	5210	MPa	ASTM D 790
Flexural Strength	163	MPa	ASTM D 790
Izod Impact notched, 1/8 in	42	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	240	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	181	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	191	°C	ASTM D 648

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.26	%	Sim. to ISO 62
Density	1170	kg/m ³	ISO 1183
Water Absorption, 24hr	0.22	%	ASTM D 570
Density	1180	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, Europe, Asia Pacific