

# LNPT<sup>™</sup> THERMOCOMP<sup>™</sup> COMPOUND JF006LZZ

JF-1006 E LE

## DESCRIPTION

LNP THERMOCOMP JF006LZZ compound is based on Polyethersulfone (PES) resin containing 30% glass fiber. Added features of this grade include: Extrusion grade, Low Extractables.

GENERAL INFORMATION	
Features	Food contact, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyethersulfone (PESU)
Processing Techniques	Injection Molding, Extrusion

  

INDUSTRY	SUB INDUSTRY
Consumer	Home Appliances, Commercial Appliance
Hygiene and Healthcare	General Healthcare

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	113	MPa	ASTM D638
Tensile Strain, break	1.8	%	ASTM D638
Tensile Modulus, 50 mm/min	9790	MPa	ASTM D638
Flexural Stress	178	MPa	ASTM D790
Flexural Modulus	9230	MPa	ASTM D790
Tensile Stress, break	99	MPa	ISO 527
Tensile Strain, break	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	10190	MPa	ISO 527
Flexural Stress	222	MPa	ISO 178
Flexural Modulus	9240	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	432	J/m	ASTM D4812
Izod Impact, notched, 23°C	58	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	12	J	ASTM D3763
Multiaxial Impact	2	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	217	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	212	°C	ASTM D648
CTE, -40°C to 40°C, flow	3.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	3.63E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	3.01E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	3.64E-05	1/°C	ISO 11359-2
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.613	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.36	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.7	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.25	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.69	%	ISO 294
Density	1.6	g/cm <sup>3</sup>	ISO 1183
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	355 – 370	°C	
Front - Zone 3 Temperature	370 – 380	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Rear - Zone 1 Temperature	345 – 355	°C	
Mold Temperature	140 – 150	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	rpm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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