

# LNPT<sup>™</sup> THERMOCOMP<sup>™</sup> COMPOUND RF00CSXZ

RF-100-12 HS

## DESCRIPTION

LNP THERMOCOMP RF00CSXZ compound is based on Nylon 6/6 resin containing 60% glass fiber. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component, Water Management
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	253	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	21360	MPa	ISO 527
Flexural Stress	375	MPa	ISO 178
Flexural Modulus	20000	MPa	ISO 178
Tensile Stress, break	253	MPa	ASTM D638
Tensile Strain, break	2.2	%	ASTM D638
Tensile Modulus, 50 mm/min	21370	MPa	ASTM D638
Flexural Stress	358	MPa	ASTM D790
Flexural Modulus	19300	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched 80*10*4 +23°C	19	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	76	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched, 23°C	160	J/m	ASTM D256
Izod Impact, unnotched, 23°C	1228	J/m	ASTM D4812
Instrumented Dart Impact Energy @ peak, 23°C	10	J	ASTM D3763
<b>THERMAL <sup>(1)</sup></b>			
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Af
CTE, -40°C to 40°C, flow	3.80E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.60E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	260	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.62E-05	1 / °C	ASTM E831
CTE, -40°C to 40°C, xflow	3.78E-05	1 / °C	ASTM E831
PHYSICAL <sup>(1)</sup>			
Density	1.72	g/cm <sup>3</sup>	ISO 1183
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.29	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.44	%	ISO 294
Density	1.72	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.3	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.4	%	ASTM D955
INJECTION MOLDING <sup>(3)</sup>			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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.

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