

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND RF0069XZ

RF-1006 FR

## DESCRIPTION

LNP THERMOCOMP RF0069XZ compound is based on Nylon 6/6 resin containing 30% glass fiber. Added features of this grade include: Flame Retardant.

GENERAL INFORMATION	
Features	Flame Retardant, 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
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, 5 mm/min	155	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	13090	MPa	ISO 527
Flexural Modulus, 2 mm/min	11950	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	165	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.2	%	ASTM D638
Tensile Modulus, 5 mm/min	13550	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	241	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	11720	MPa	ASTM D790
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched 80*10*4 +23°C	8	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1U
Multiaxial Impact	2	J	ISO 6603
Izod Impact, notched, 23°C	80	J/m	ASTM D256
Izod Impact, unnotched, 23°C	710	J/m	ASTM D4812
Instrumented Dart Impact Total Energy, 23°C	8	J	ASTM D3763
<b>THERMAL <sup>(1)</sup></b>			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	240	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	255	°C	ISO 75/Bf
HDT, 0.45 MPa, 3.2 mm, unannealed	254	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	242	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	2.54E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	4.97E-05	1/°C	ASTM D696
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.68	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.54	%	ISO 62
Specific Gravity	1.69	-	ASTM D792
Density	1.69	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 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	1 – 4	%	ASTM D955
<b>FLAME CHARACTERISTICS <sup>(3)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-101281619</a>	-	-
UL Yellow Card Link 2	<a href="#">E207780-101281630</a>	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</sup></b>			
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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (4) 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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