

**Americas: COMMERCIAL** 

## LNP\* Thermotuf\* Compound PX06417

Also known as: PF-1008 HI HS UV Product Reorder Name: PX06417

LNP THERMOTUF\* PX06417 is a compound based on Nylon 6 resin containing Glass Fiber. Added features of this material include: Heat Stabilized.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	152	MPa	ASTM D 638
Tensile Strain, break	2.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	12820	MPa	ASTM D 638
Flexural Stress	228	MPa	ASTM D 790
Flexural Modulus	8960	MPa	ASTM D 790
Tensile Stress, break	147	MPa	ISO 527
Tensile Strain, break	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	11400	MPa	ISO 527
Flexural Stress	243	MPa	ISO 178
Flexural Modulus	11000	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1089	J/m	ASTM D 4812
Izod Impact, notched, 23°C	149	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	15	J	ASTM D 3763
Multiaxial Impact	4	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	70	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	220	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	208	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.59E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.6E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.46	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.64	%	ASTM D 570
	0.0-	, 0	
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs  Mold Shrinkage, xflow, 24 hrs			ASTM D 955 ASTM D 955
	0.2	%	
Mold Shrinkage, xflow, 24 hrs	0.2 0.9	% %	ASTM D 955
Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, flow, 24 hrs	0.2 0.9 0.17	% % %	ASTM D 955 ISO 294
Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs	0.2 0.9 0.17 0.93	% % % %	ASTM D 955 ISO 294 ISO 294
Mold Shrinkage, xflow, 24 hrs Mold Shrinkage, flow, 24 hrs Mold Shrinkage, xflow, 24 hrs Density	0.2 0.9 0.17 0.93 1.46	% % % % g/cm³	ASTM D 955 ISO 294 ISO 294 ISO 1183

## **Processing**

Parameter		
Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	265 - 275	°C
Front - Zone 3 Temperature	275 - 290	°C
Middle - Zone 2 Temperature	265 - 275	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:10/02/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

## PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

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- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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