

LNP™ THERMOTUF™ COMPOUND PX06417

PF-1008 HI HS UV
REGION AMERICAS

DESCRIPTION

LNP THERMOTUF PX06417 is a compound based on Nylon 6 resin containing 40% Glass Fiber. Added features of this material include: Heat Stabilized, High Impact, UV Stabilized.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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
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			
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/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1A
THERMAL			
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

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	207	°C	ISO 75/Af
PHYSICAL			
Density	1.46	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.64	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.17	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.93	%	ISO 294
Density	1.46	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.02	%	ISO 62
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP
MECHANICAL PROPERTIES			
Flexural modulus	8960	MPa	ISO 178/1A
INJECTION MOLDING			
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	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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