

LNP™ THERMOTUF™ COMPOUND IX02582

PDX-I-02582
REGION AMERICAS

DESCRIPTION

LNP THERMOTUF IX02582 is a compound based on Nylon 6/12 resin containing Proprietary Filler(s). Added features of this material include: High Impact.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	156	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	12120	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	233	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	235	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	9700	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	157	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.8	%	ISO 527
Tensile Modulus, 1 mm/min	11810	MPa	ISO 527
Flexural Stress	233	MPa	ISO 178
Flexural Modulus, 2 mm/min	9980	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	995	J/m	ASTM D 4812
Izod Impact, notched, 23°C	158	J/m	ASTM D 256
Multiaxial Impact	5	J	ISO 6603
Instrumented Impact Total Energy, 23°C	20	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	62	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	214	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	198	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	7.5E-05	1/°C	ASTM D 696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	210	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	196	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.41	-	ASTM D 792
Density	1.41	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.16	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.1 – 0.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1 – 3	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.28	%	ISO 62
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°C	
Back Pressure	0.2 – 0.3	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.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.