

LNP™ THERMOTUF™ COMPOUND MF004AI

MF-1004 HI
REGION AMERICAS

DESCRIPTION

LNP THERMOTUF MF004AI is a compound based on Polypropylene resin containing 20% Glass Fiber. Added features of this material include: High Impact.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	39	MPa	ASTM D 638
Tensile Strain, break	4.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	4820	MPa	ASTM D 638
Flexural Stress	41	MPa	ASTM D 790
Tensile Stress, break	37	MPa	ISO 527
Tensile Strain, break	4.5	%	ISO 527
Tensile Modulus, 1 mm/min	4940	MPa	ISO 527
Flexural Stress	46	MPa	ISO 178
Flexural Modulus	3000	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	437	J/m	ASTM D 4812
Izod Impact, notched, 23°C	170	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	14	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	150	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.06E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.05E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.8E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	104	°C	ISO 75/Af

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Density	1.03	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	1.1 – 1.3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.1 – 1.3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.2	%	ISO 294
Density	1.03	g/cm ³	ISO 1183
MECHANICAL PROPERTIES			
Flexural modulus	2750	MPa	ISO 178/1A
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°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.

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