

# LNP™ THERMOTUF™ V1000 compound

Polyamide 66

SABIC Innovative Plastics

## Message:

LNP THERMOTUF\* V1000 is a compound based on Nylon resin. Added features of this material include: High Impact.

Also known as: LNP\* THERMOTUF\* Compound V-1000

Product reorder name: V1000

General Information			
UL YellowCard	E207780-101282736		
Features	Impact resistance, high		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.07	g/cm <sup>3</sup>	ASTM D792, ISO 1183
Molding Shrinkage			
Flow: 24 hours	1.3 - 1.5	%	ASTM D955
Transverse flow: 24 hours	1.3 - 1.5	%	ASTM D955
Vertical flow direction: 24 hours	1.3 - 1.5	%	ISO 294-4
Flow direction: 24 hours	1.3 - 1.5	%	ISO 294-4
Water Absorption			
24 hr, 50% RH	0.80	%	ASTM D570
Equilibrium, 23°C, 50% RH	1.4	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- <sup>1</sup>	1930	MPa	ASTM D638
--	1800	MPa	ISO 527-2/1
Tensile Strength			
Yield	45.1	MPa	ASTM D638
Yield	44.0	MPa	ISO 527-2
Fracture	50.6	MPa	ASTM D638
Fracture	50.0	MPa	ISO 527-2
Tensile Elongation			
Yield	4.6	%	ASTM D638
Yield	17	%	ISO 527-2
Fracture	60	%	ASTM D638
Fracture	170	%	ISO 527-2
Flexural Modulus			
--	1930	MPa	ASTM D790
--	1700	MPa	ISO 178
Flexural Strength			
--	74.7	MPa	ASTM D790

--	65.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact <sup>2</sup> (23°C)	84	kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength <sup>3</sup> (23°C)	140	kJ/m <sup>2</sup>	ISO 180/1U
Instrumented Dart Impact			
23°C, Energy at Peak Load	56.9	J	ASTM D3763
--	77.3	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, unannealed, 3.20mm	53.3	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span <sup>4</sup>	56.0	°C	ISO 75-2/Af
Linear thermal expansion coefficient			ASTM E831, ISO 11359-2
Flow: -40 to 40°C	1.3E-4	cm/cm/°C	ASTM E831, ISO 11359-2
Lateral: -40 to 40°C	1.3E-4	cm/cm/°C	ASTM E831, ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.15 - 0.25	%	
Rear Temperature	260 - 271	°C	
Middle Temperature	271 - 282	°C	
Front Temperature	288 - 299	°C	
Processing (Melt) Temp	271 - 293	°C	
Mold Temperature	48.9 - 93.3	°C	
Back Pressure	0.344 - 0.689	MPa	
Screw Speed	10 - 60	rpm	
NOTE			
1.	50 mm/min		
2.	80*10*4		
3.	80*10*4		
4.	80*10*4 mm		

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Recommended distributors for this material

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