

LNP* Thermotuf* VF004S

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP THERMOTUF* VF004S is a compound based on Nylon resin containing Glass Fiber. Added features of this material include: Heat Stabilized.

Also known as: LNP* Thermotuf* Compound VF-1004 HS

Product reorder name: VF004S

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermotuf*
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement
Additive	• Heat Stabilizer
Features	• Heat Stabilized
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.23 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.40 to 0.60 %	
Across Flow: 24 hr	0.80 to 1.0 %	
Water Absorption		
24 hr, 50% RH	0.74 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.1 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	6480 MPa	ASTM D638
--	6210 MPa	ISO 527-2/1
Tensile Strength		
Break ⁴	102 MPa	ASTM D638
Break	97.0 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁴	2.8 %	ASTM D638
Yield	2.6 %	ISO 527-2/5
Break ⁴	3.0 %	ASTM D638
Break	3.0 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	5620 MPa	ASTM D790
-- ⁶	5080 MPa	ISO 178
Flexural Strength ⁵ (Break, 50.0 mm Span)	156 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	130 J/m	ASTM D256
23°C ⁷	12 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	700 J/m	ASTM D4812
23°C ⁷	43 kJ/m ²	ISO 180/1U

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Impact	Nominal Value Unit	Test Method
Instrumented Dart Impact		
23°C, Total Energy	22.1 J	ASTM D3763
--	6.10 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	256 °C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ⁸	235 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	240 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁸	235 °C	ISO 75-2/Af
CLTE		ASTM D696
Flow: -30 to 30°C	0.000030 cm/cm/°C	
Transverse: -30 to 30°C	0.000081 cm/cm/°C	
Injection	Nominal Value Unit	
Drying Temperature	82.2 °C	
Drying Time	4.0 hr	
Suggested Max Moisture	0.15 %	
Rear Temperature	260 to 271 °C	
Middle Temperature	277 to 288 °C	
Front Temperature	293 to 304 °C	
Processing (Melt) Temp	282 to 293 °C	
Mold Temperature	93.3 to 110 °C	
Back Pressure	0.172 to 0.344 MPa	
Screw Speed	30 to 60 rpm	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ Type I, 5.0 mm/min

⁵ 1.3 mm/min

⁶ 2.0 mm/min

⁷ 80*10*4

⁸ 80*10*4 mm

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Where to Buy

Supplier

SABIC Innovative Plastics

Pittsfield, MA USA

Telephone: 800-845-0600

Web: <http://www.sabic-ip.com/>

Distributor

Nexeo Solutions

Telephone: 800-531-7106

Web: <http://www.nexeosolutions.com/>

Availability: North America



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– Kevin Chase, Owner & President, Chase Plastics



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