

LNP* Thermocomp* RF004S

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP* Thermocomp* RF004S is a Nylon 6/6 containing Glass Fiber. Characteristics are Heat Stabilized.

Also known as: LNP* Thermocomp* Compound RF-1004 HS BK8-115

Product Reorder name: RF004S

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
UL Yellow Card ²	• E45195-236011
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermocomp*
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	1.30 g/cm ³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.50 to 0.80 %	
Across Flow: 24 hr	1.0 to 3.0 %	
Water Absorption		
24 hr, 50% RH	1.0 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.6 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ⁴	7930 MPa	ASTM D638
--	7190 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁵	121 MPa	ASTM D638
Yield	121 MPa	ISO 527-2/5
Break ⁵	121 MPa	ASTM D638
Break	121 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁵	2.2 %	ASTM D638
Yield	2.0 %	ISO 527-2/5
Break ⁵	2.2 %	ASTM D638
Break	2.0 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁶	5350 MPa	ASTM D790
-- ⁷	5870 MPa	ISO 178
Flexural Strength		
--	186 MPa	ISO 178
Yield, 50.0 mm Span ⁶	187 MPa	ASTM D790
Break, 50.0 mm Span ⁶	188 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	50 J/m	ASTM D256
23°C ⁸	4.0 kJ/m ²	ISO 180/1A

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Impact	Nominal Value Unit	Test Method
Unnotched Izod Impact		
23°C	520 J/m	ASTM D4812
23°C ⁸	31 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Total Energy	7.50 J	ASTM D3763
--	1.40 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	255 °C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ⁹	253 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	236 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁹	226 °C	ISO 75-2/ Af
CLTE		ASTM D696
Flow: -30 to 30°C	3.0E-6 cm/cm/°C	
Transverse: -30 to 30°C	8.0E-6 cm/cm/°C	
Injection	Nominal Value Unit	
Drying Temperature	82.2 °C	
Drying Time	4.0 hr	
Suggested Max Moisture	0.15 to 0.25 %	
Rear Temperature	266 to 277 °C	
Middle Temperature	282 to 293 °C	
Front Temperature	293 to 304 °C	
Processing (Melt) Temp	282 to 304 °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 A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 50 mm/min

⁵ Type I, 5.0 mm/min

⁶ 1.3 mm/min

⁷ 2.0 mm/min

⁸ 80*10*4

⁹ 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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