

LNP* Thermocomp* RF006SXZ

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP* Thermocomp* RF006SXZ is a Nylon 6/6 base resin containing glass fiber. Characteristics of this grade are Heat Stabilization.

Also known as: LNP* Thermocomp* Compound RF-1006 HS
Product Reorder name: RF006SXZ

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
UL Yellow Card ²	• E45195-236011 • E121562-101281586
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	1.40 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.30 to 0.50 %	
Across Flow: 24 hr	0.90 to 2.0 %	
Water Absorption		
24 hr, 50% RH	0.67 %	ASTM D570
Equilibrium, 23°C, 50% RH	0.99 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ⁴	11400 MPa	ASTM D638
--	10700 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁵	200 MPa	ASTM D638
Yield	195 MPa	ISO 527-2/5
Break ⁵	200 MPa	ASTM D638
Break	194 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁵	3.3 %	ASTM D638
Yield	3.3 %	ISO 527-2/5
Break ⁵	3.3 %	ASTM D638
Break	3.5 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁶	9510 MPa	ASTM D790
-- ⁷	9260 MPa	ISO 178
Flexural Strength		
--	279 MPa	ISO 178
Yield, 50.0 mm Span ⁶	286 MPa	ASTM D790
Break, 50.0 mm Span ⁶	286 MPa	ASTM D790

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Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	130 J/m	ASTM D256
23°C ⁸	15 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	1300 J/m	ASTM D4812
23°C ⁸	82 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Total Energy	13.5 J	ASTM D3763
--	3.70 J	ISO 6603-2

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	260 °C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ⁹	259 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	251 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁹	243 °C	ISO 75-2/Af
CLTE		ASTM D696
Flow: -30 to 30°C	0.000032 cm/cm/°C	
Transverse: -30 to 30°C	0.000064 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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– Birgit Elvardt Bader, Production Manager, Micotron

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– Kevin Chase, Owner & President, Chase Plastics



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