

LNP* Thermocomp* RF006H

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP THERMOCOMP* RF006H is a compound based on Nylon 66 resin containing Glass Fiber. Added feature: Healthcare.

Also known as: LNP* Thermocomp* Compound RF-1006

Product reorder name: RF006H

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermocomp*
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement
Uses	• Medical/Healthcare Applications
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity		
--	• 1.40 • 1.41 g/cm³	ASTM D792
--	1.40 g/cm³	ISO 1183
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.30 to 0.50 %	ISO 294-4
Across Flow: 24 hr	1.4 to 1.6 %	
Water Absorption		
24 hr, 50% RH	0.69 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.2 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	8980 MPa	ISO 527-2/1
Tensile Strength		
Break ³	165 MPa	ASTM D638
Break	154 MPa	ISO 527-2/5
Tensile Elongation		
Break ³	2.4 %	ASTM D638
Break	2.4 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁴	9440 MPa	ASTM D790
-- ⁵	9220 MPa	ISO 178
Flexural Strength ⁴ (Break, 50.0 mm Span)	235 MPa	ASTM D790
Coefficient of Friction		ASTM D3702 Modified
vs. Itself - Dynamic	0.71	
vs. Itself - Static	0.57	
Wear Factor - Washer	75.0 ^{10^-10} in^5-min/ft-lb-hr	ASTM D3702 Modified
Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	59 J/m	ASTM D256
23°C ⁶	7.5 kJ/m²	ISO 180/1A
Unnotched Izod Impact		
23°C	650 J/m	ASTM D4812
23°C ⁶	52 kJ/m²	ISO 180/1U

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Impact	Nominal Value Unit	Test Method
Instrumented Dart Impact		
23°C, Energy at Peak Load	6.50 J	ASTM D3763
--	2.57 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	265 °C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	255 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁷	243 °C	ISO 75-2/Af
CLTE		ASTM E831
Flow: -40 to 40°C	0.000030 cm/cm/°C	ISO 11359-2
Transverse: -40 to 40°C	0.000073 cm/cm/°C	
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.50 mm, Testing by SABIC)	HB	UL 94
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 Typical properties: these are not to be construed as specifications.

³ Type I, 5.0 mm/min

⁴ 1.3 mm/min

⁵ 2.0 mm/min

⁶ 80*10*4

⁷ 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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