

LNP* Thermocomp* RF003H

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP* Thermocomp* RF003H is a compound based on PA 66 containing 15% Glass Fiber. Added feature of this grade is: Healthcare.

Also known as: LNP* Thermocomp* Compound RF-1003

Product reorder name: RF003H

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, 15% Filler by Weight
Uses	• Medical/Healthcare Applications
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.22 g/cm ³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 24 hr	1.0 to 3.0 %	
Across Flow: 24 hr	1.0 to 3.0 %	
Water Absorption		
24 hr, 50% RH	1.1 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.6 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	5130 MPa	ASTM D638
--	5170 MPa	ISO 527-2/1
Tensile Strength		
Break ⁴	103 MPa	ASTM D638
Break	97.0 MPa	ISO 527-2/5
Tensile Elongation		
Break ⁴	2.6 %	ASTM D638
Break	2.3 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	4510 MPa	ASTM D790
-- ⁶	3960 MPa	ISO 178
Flexural Strength		
--	156 MPa	ISO 178
Break, 50.0 mm Span ⁵	171 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	57 J/m	ASTM D256
23°C ⁷	4.8 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	440 J/m	ASTM D4812
23°C ⁷	27 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Total Energy	6.58 J	ASTM D3763
--	1.94 J	ISO 6603-2

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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	248 °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	212 °C	ISO 75-2/Af
CLTE		ASTM D696
Flow: -30 to 30°C	0.000053 cm/cm/°C	
Transverse: -30 to 30°C	0.000080 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 Typical properties: these are not to be construed as specifications.

³ 5.0 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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– Birgit Elvardt Bader, Production Manager, Micotron

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– Kevin Chase, Owner & President, Chase Plastics



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