

LNP* Thermocomp* RF006ESZ

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

LNP THERMOCOMP* RF006ESZ is a compound based on Nylon 66 resin containing Glass Fiber. Added features of this material include: Easy Molding.

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

Product reorder name: RF006ESZ

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
UL Yellow Card ²	• E45195-235921
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Thermocomp*
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement
Features	• Good Moldability
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.40 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		
Flow: 24 hr	0.20 to 0.40 %	ASTM D955
Across Flow: 24 hr	0.90 to 1.1 %	ASTM D955
Across Flow: 24 hr	1.0 %	ISO 294-4
Flow: 24 hr	0.29 %	ISO 294-4
Water Absorption		
24 hr, 50% RH	0.87 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.1 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ⁴	9860 MPa	ASTM D638
--	9400 MPa	ISO 527-2/1
Tensile Strength		
Break	141 MPa	ASTM D638
Break	140 MPa	ISO 527-2
Tensile Elongation		
Break	2.3 %	ASTM D638
Break	2.6 %	ISO 527-2
Flexural Modulus		
--	7450 MPa	ASTM D790
--	8900 MPa	ISO 178
Flexural Strength		
--	207 MPa	ASTM D790
--	218 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	80 J/m	ASTM D256
23°C ⁵	8.6 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	730 J/m	ASTM D4812
23°C ⁵	47 kJ/m ²	ISO 180/1U

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Impact	Nominal Value Unit	Test Method
Instrumented Dart Impact		
23°C, Energy at Peak Load	8.10 J	ASTM D3763
--	2.50 J	ISO 6603-2
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	253 °C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	231 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁶	222 °C	ISO 75-2/Af
CLTE		
Flow: -40 to 40°C	0.000030 cm/cm/°C	ASTM E831
Flow: -40 to 40°C	0.000027 cm/cm/°C	ISO 11359-2
Transverse: -40 to 40°C	0.000075 cm/cm/°C	ASTM E831 ISO 11359-2
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 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 80*10*4

⁶ 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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