

LNP* Thermocomp* RFB53XXZ

Polyamide 66

SABIC Innovative Plastics



IDES | Prospector

ides.com/prospector

Technical Data

Product Description

LNP* Thermocomp* RFB53XXZ is a compound based on Nylon 66 resin containing Glass Fiber, Milled Glass.

Also known as: LNP* Thermocomp* Compound RF-1008 MG

Product reorder name: RFB53XXZ

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 Milled\Glass Fiber
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.46 g/cm ³	ASTM D792
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.40 to 0.70 %	
Across Flow: 24 hr	0.90 to 2.0 %	
Water Absorption		
24 hr, 50% RH	0.63 %	ASTM D570
Equilibrium, 23°C, 50% RH	0.95 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	8450 MPa	ASTM D638
--	8110 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁴	124 MPa	ASTM D638
Yield	125 MPa	ISO 527-2/5
Break ⁴	115 MPa	ASTM D638
Break	124 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁴	2.6 %	ASTM D638
Yield	2.6 %	ISO 527-2/5
Break ⁴	2.7 %	ASTM D638
Break	2.7 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	7320 MPa	ASTM D790
-- ⁶	7050 MPa	ISO 178
Flexural Strength		
--	183 MPa	ISO 178
Yield, 50.0 mm Span ⁵	186 MPa	ASTM D790
Break, 50.0 mm Span ⁵	186 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	37 J/m	ASTM D256
23°C ⁷	4.4 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	500 J/m	ASTM D4812
23°C ⁷	33 kJ/m ²	ISO 180/1U

LNP* Thermocomp* RFB53XXZ

Polyamide 66

SABIC Innovative Plastics



ides.com/prospector

Impact	Nominal Value Unit	Test Method
Instrumented Dart Impact		
23°C, Total Energy	7.70 J	ASTM D3763
--	2.10 J	ISO 6603-2
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	253 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	241 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁸	234 °C	ISO 75-2/Af
CLTE		ASTM D696
Flow: -30 to 30°C	0.000040 cm/cm/°C	
Transverse: -30 to 30°C	0.000084 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 50 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

LNP* Thermocomp* RFB53XXZ

Polyamide 66

SABIC Innovative Plastics



ides.com/prospector

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



Founded in 1986 and based in Laramie, Wyoming, IDES is now part of the UL family of companies. UL is a premier global independent safety science company with more than a century of proven history. Employing nearly 10,000 professionals in over 100 countries, UL has five distinct business units -- Product Safety, Environment, Life & Health, Knowledge Services and Verification Services -- to meet the expanding needs of our customers and to deliver on our public safety mission.



Prospector Plastics Database - www.ides.com/prospector

Prospector is a searchable online database that includes 85,000 data sheets from 875 manufacturers and 44,000 UL yellow cards. Each data sheet includes property, processing and supplier contact information. Prospector is relied on by nearly 400,000 design engineers and plastics processors. Using Prospector, they save time with plastic material selection by quickly and easily referencing technical information critical to the success of their products.

"Prospector is absolutely the best and most well-known search engine for plastic raw materials in the world. We use Prospector every day – it's a real time saver!"

– Birgit Elvardt Bader, Production Manager, Micotron

Power Searches

Property Search – select plastics by 500 key properties and design parameters.

Alternative Resins Search – find replacement plastics within minutes.

Automotive Plastics Search – easily locate automotive approved plastics.

Curve Data – view, overlay and export curve data.



Material Data Management – www.ides.com/datasheets

With our data management services, plastic suppliers and distributors can have custom search interfaces available on their website for their customers, website visitors, sales and customer service teams. These provide intuitive ways to find and view technical data sheets for their products.

"With UL IDES data services, our website now displays the most current information on the products we distribute and links to our backend RFQ and sales order system, adding both value and service for our customers."

– Kevin Chase, Owner & President, Chase Plastics



Advertising – www.ides.com/advertise

Reach 365,000 pre-qualified plastics professionals and generate leads with proven techniques. Electronic newsletter insertions, sponsored webinars and powerful online ads are available to make the most of your lead-generation program.

For more information, call: 800.788.4668 or 307.742.9227 ext. 220