

LNP* Thermocomp* RF006XXP

Polyamide 66

SABIC Innovative Plastics Europe



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Technical Data

Product Description

30% glass fibre reinforced Polyamide 66 injection moulding resin.

Also known as: LNP* Thermocomp* Compound RF1006

Product reorder name: RF006XXP

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics Europe • LNP* Thermocomp*
Availability	• Europe
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Density	1.37 g/cm ³	ISO 1183
Molding Shrinkage - Flow ³	0.20 to 0.40 %	Internal Method
Water Absorption		ISO 62
Saturation, 23°C	4.5 %	
Equilibrium, 23°C, 50% RH	1.3 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	9500 MPa	ISO 527-2/1
Tensile Stress (Break)	175 MPa	ISO 527-2/5
Tensile Strain (Break)	3.0 %	ISO 527-2/5
Flexural Modulus ⁴	9000 MPa	ISO 178
Flexural Strength ^{4, 5}	265 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength ⁶		ISO 179/1eA
-30°C	7.0 kJ/m ²	
23°C	8.5 kJ/m ²	
Charpy Unnotched Impact Strength ⁶		ISO 179/1eU
-30°C	55 kJ/m ²	
23°C	75 kJ/m ²	
Notched Izod Impact Strength ⁷		ISO 180/1A
-40°C	8.0 kJ/m ²	
-30°C	8.5 kJ/m ²	
-20°C	9.0 kJ/m ²	
23°C	10 kJ/m ²	

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (L-Scale)	113	ISO 2039-2

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature ⁸		
0.45 MPa, Unannealed, 100 mm Span	260 °C	ISO 75-2/Be
1.8 MPa, Unannealed, 100 mm Span	248 °C	ISO 75-2/Ae
Vicat Softening Temperature		
--	258 °C	ISO 306/B50
--	255 °C	ISO 306/B120
Ball Pressure Test (125°C)	Pass	IEC 60695-10-2

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Thermal	Nominal Value Unit	Test Method
CLTE		ISO 11359-2
Flow: 23 to 60°C	0.000025 cm/cm/°C	
Transverse: 23 to 60°C	0.000075 cm/cm/°C	
Thermal Conductivity	0.33 W/m/K	ISO 8302
RTI Elec	65.0 °C	UL 746
RTI Imp	65.0 °C	UL 746
RTI Str	65.0 °C	UL 746
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E+16 ohm	IEC 60093
Volume Resistivity	> 1.0E+16 ohm·cm	IEC 60093
Electric Strength (3.20 mm, in Oil)	19 kV/mm	IEC 60243-1
Relative Permittivity		IEC 60250
50 Hz	3.47	
60 Hz	3.47	
1 MHz	3.23	
Dissipation Factor		IEC 60250
50 Hz	0.0068	
60 Hz	0.0068	
1 MHz	0.015	
Comparative Tracking Index		IEC 60112
--	500 V	
Solution B	400 V	
Flammability	Nominal Value Unit	Test Method
Burning Rate		ISO 3795
2.00 mm	6.0 mm/min	
3.00 mm	2.0 mm/min	
Flame Rating		UL 94
0.750 mm	HB	
3.00 mm	HB	
Glow Wire Flammability Index (2.00 mm)	650 °C	IEC 60695-2-12
Oxygen Index	25 %	ISO 4589-2
Injection	Nominal Value Unit	
Drying Temperature	75.0 to 85.0 °C	
Drying Time	4.0 to 6.0 hr	
Suggested Max Moisture	0.20 %	
Hopper Temperature	60.0 to 80.0 °C	
Rear Temperature	270 to 290 °C	
Middle Temperature	260 to 280 °C	
Front Temperature	260 to 280 °C	
Nozzle Temperature	250 to 270 °C	
Processing (Melt) Temp	260 to 290 °C	
Mold Temperature	70.0 to 120 °C	

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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 Tensile Bar

⁴ 2.0 mm/min

⁵ Break

⁶ 80*10*4 sp=62mm

⁷ 80*10*4

⁸ 120*10*4 mm

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Where to Buy

Supplier

SABIC Innovative Plastics Europe

, Netherlands

Telephone: +36-1-238-5060

Web: <http://www.sabic-ip.com/>

Distributor

Polymix

Telephone: +33-3-8920-1380

Web: <http://www.polymix.eu/>

Availability: France

RESINEX Group

RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.

Telephone: +32-14-672511

Web: <http://www.resinex.com/>

Availability: Europe

Ultrapolymers

Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.

Telephone: +32-11-57-95-57

Web: <http://www.ultrapolymers.com/>

Availability: Europe



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