

LNP* Lubricomp* RFP36

Polyamide 66

SABIC Innovative Plastics

Product Description

LNP* Lubricomp* RFP36 is a compound based on Nylon 66 resin containing Glass Fiber, PTFE, Silicone. Added features of this material include: Internally Lubricated. This product is also known as Lubricomp* RFL-4536.

Also known as: LNP* Lubricomp* Compound RFL-4536

Product reorder name: RFP36

General

Filler / Reinforcement	• Glass Fiber Reinforcement
Additive	• PTFE + Silicone Lubricant
Features	• Lubricated
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.48 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		
Flow: 24 hr	0.20 %	ASTM D955
Across Flow: 24 hr	1.0 %	ASTM D955
Across Flow: 24 hr	0.97 %	ISO 294-4
Flow: 24 hr	0.21 %	ISO 294-4
Water Absorption		
24 hr, 50% RH	0.78 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.2 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ²	10500 MPa	ASTM D638
--	9800 MPa	ISO 527-2/1
Flexural Modulus	7580 MPa	ASTM D790
Flexural Strength	195 MPa	ASTM D790
Coefficient of Friction		ASTM D3702 Modified
vs. Itself - Dynamic	0.56	
vs. Itself - Static	0.48	
Wear Factor - Washer	11.0 ^{10⁻¹⁰} in ⁵ -min/ft-lb-hr	ASTM D3702 Modified

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	140 J/m	ASTM D256
23°C ³	9.0 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	780 J/m	ASTM D4812
23°C ³	50 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Energy at Peak Load	7.00 J	ASTM D3763
--	5.00 J	ISO 6603-2

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed, 3.20 mm	233 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁴	236 °C	ISO 75-2/Af

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

LNP* Lubricomp* RFP36
Polyamide 66
SABIC Innovative Plastics

Injection	Nominal Value Unit
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 Typical properties: these are not to be construed as specifications.
- ² 50 mm/min
- ³ 80*10*4
- ⁴ 80*10*4 mm