

LNP™ LUBRICOMP™ Compound UFL36SXP

Polyphthalamide
SABIC

PROSPECTOR®

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Technical Data

Product Description

LNP LUBRICOMP UFL36SXP compound is based on Polyphthalamide (PPA) resin containing 30% glass fiber, 15% PTFE. Added features of this grade include: Internally Lubricated, Wear Resistant, Heat Stabilized.

General

Material Status	• Commercial: Active		
Literature ¹	<ul style="list-style-type: none"> • SABIC Material Solutions For Conveyor Systems • SABIC Material Solutions for Home Appliances • Technical Datasheet 		
Search for UL Yellow Card	<ul style="list-style-type: none"> • SABIC • LNP™ LUBRICOMP™ Compound 		
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific 	<ul style="list-style-type: none"> • Europe • Latin America 	<ul style="list-style-type: none"> • North America
Filler / Reinforcement	<ul style="list-style-type: none"> • Glass Fiber, 30% Filler by Weight 	<ul style="list-style-type: none"> • PTFE, 15% Filler by Weight 	
Additive	<ul style="list-style-type: none"> • Heat Stabilizer 		
Features	<ul style="list-style-type: none"> • Heat Stabilized • High Heat Resistance 	<ul style="list-style-type: none"> • High Stiffness • High Strength 	<ul style="list-style-type: none"> • Wear Resistant
Uses	<ul style="list-style-type: none"> • Appliances • Automotive Applications • Automotive Under the Hood 	<ul style="list-style-type: none"> • Cell Phones • Computer Components • Electrical Parts 	<ul style="list-style-type: none"> • Windows & Doors
Processing Method	<ul style="list-style-type: none"> • Injection Molding 		

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.55 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		ASTM D955 ISO 294-4
Flow : 24 hr	0.20 %	
Across Flow : 24 hr	0.80 %	
Water Absorption (24 hr, 23°C, 50% RH)	0.33 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	11000 MPa	ASTM D638
--	10200 MPa	ISO 527-1/1
Tensile Strength		
Break ⁴	196 MPa	ASTM D638
Break	191 MPa	ISO 527-2/5
Tensile Elongation		
Break ⁴	2.5 %	ASTM D638
Break	2.4 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	9870 MPa	ASTM D790
-- ⁶	9500 MPa	ISO 178
Flexural Strength		
50.0 mm Span ⁵	275 MPa	ASTM D790
-- ⁶	260 MPa	ISO 178



Mechanical	Nominal Value Unit	Test Method
Coefficient of Friction ⁷		ASTM D3702
Dynamic	0.56	
Static	0.46	
Wear Factor ⁷	20 10 ⁻⁸ mm ³ /N·m	ASTM D3702

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	110 J/m	ASTM D256
23°C ⁸	12 kJ/m ²	ISO 180/1A
Unnotched Izod Impact		
23°C	950 J/m	ASTM D4812
23°C ⁸	50 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		
23°C, Energy at Peak	6.00 J	ASTM D3763
--	2.00 J	ISO 6603-2

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
1.8 MPa, Unannealed, 3.20 mm	260 °C	ASTM D648
1.8 MPa, Unannealed, 4.00 mm, 64.0 mm Span ⁸	260 °C	ISO 75-2/ Af

Injection	Nominal Value Unit
Drying Temperature	120 °C
Drying Time	4.0 hr
Suggested Max Moisture	0.15 %
Rear Temperature	310 to 320 °C
Middle Temperature	315 to 325 °C
Front Temperature	325 to 340 °C
Processing (Melt) Temp	315 to 330 °C
Mold Temperature	150 to 170 °C
Back Pressure	0.200 to 0.300 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 Modified: Manual

⁸ 80*10*4 mm

