

## SABIC Innovative Plastics LNP LUBRICOMP IFL21 PA6.12

Category : Polymer , Thermoplastic , Nylon , Nylon 612

### Material Notes:

LNP LUBRICOMP\* IFL21 is a compound based on Nylon 6/12 resin containing 5% Glass Fiber, 10% PTFE. Added features of this material include: Wear Resistant.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-LUBRICOMP-IFL21-PA612.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-LUBRICOMP-IFL21-PA612.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.17 g/cc	1.17 g/cc	ASTM D792
Density	1.17 g/cc	0.0423 lb/in <sup>3</sup>	ASTM D792
Moisture Absorption	0.200 %	0.200 %	50% RH, 24 hrs; ASTM D570
	0.250 %	0.250 %	23 <sup>o</sup> C / 50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	
Linear Mold Shrinkage, Transverse	0.0080 - 0.011 cm/cm	0.0080 - 0.011 in/in	ASTM D955
	@Time 86400 sec	@Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	63.0 MPa	9140 psi	Type I, 5 mm/min; ASTM D638
	64.0 MPa	9280 psi	5 mm/min; ISO 527
Tensile Strength, Yield	63.0 MPa	9140 psi	Type I, 5 mm/min; ASTM D638
	64.0 MPa	9280 psi	5 mm/min; ISO 527
Elongation at Break	2.2 %	2.2 %	Type I, 5 mm/min; ASTM D638
	2.4 %	2.4 %	5 mm/min; ISO 527
Elongation at Yield	2.2 %	2.2 %	Type I, 5 mm/min; ASTM D638
	2.4 %	2.4 %	5 mm/min; ISO 527
Tensile Modulus	3.50 GPa	508 ksi	1 mm/min; ISO 527
	3.62 GPa	525 ksi	50 mm/min; ASTM D638
Flexural Strength	97.0 MPa	14100 psi	ISO 178
	98.0 MPa	14200 psi	1.3 mm/min, 50 mm span; ASTM D790

Mechanical Properties	Metric	English	Comments
Flexural Yield Strength	99.0 MPa	14400 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.87 GPa	416 ksi	1.3 mm/min, 50 mm span; ASTM D790
	3.02 GPa	438 ksi	2 mm/min; ISO 178
Izod Impact, Notched	0.330 J/cm	0.618 ft-lb/in	ASTM D256
Izod Impact, Unnotched	2.92 J/cm	5.47 ft-lb/in	ASTM D4812
Izod Impact, Notched (ISO)	3.00 kJ/m <sup>2</sup>	1.43 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1A
Izod Impact, Unnotched (ISO)	17.0 kJ/m <sup>2</sup>	8.09 ft-lb/in <sup>2</sup>	80*10*4; ISO 180/1U
Dart Drop, Total Energy	3.00 J @Temperature 23.0 Â°C	2.21 ft-lb @Temperature 73.4 Â°F	ASTM D3763
Impact Test	1.00 J	0.738 ft-lb	Multiaxial Impact; ISO 6603
Coefficient of Friction, Dynamic	0.36	0.36	ASTM D3702 Modified
Coefficient of Friction, Static	0.32	0.32	ASTM D3702 Modified
K (wear) Factor	14.1 x 10 <sup>-8</sup> mm <sup>3</sup> /N-M	7.00 x 10 <sup>-10</sup> in <sup>3</sup> - min/ft-lb-hr	Ring; ASTM D3702 Modified
	260 x 10 <sup>-8</sup> mm <sup>3</sup> /N-M	129 x 10 <sup>-10</sup> in <sup>3</sup> - min/ft-lb-hr	Washer; ASTM D3702 Modified

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	82.0 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	45.6 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
CTE, linear, Transverse to Flow	125 Âµm/m-Â°C @Temperature -30.0 - 30.0 Â°C	69.4 Âµin/in-Â°F @Temperature -22.0 - 86.0 Â°F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	197 Â°C	387 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/Bf
	200 Â°C @Thickness 3.20 mm	392 Â°F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	162 Â°C	324 Â°F	Flatw 80*10*4 sp=64mm; ISO 75/ Af
	183 Â°C @Thickness 3.20 mm	361 Â°F @Thickness 0.126 in	unannealed; ASTM D648

## **Contact Songhan Plastic Technology Co.,Ltd.**

**Website : [www.lookpolymers.com](http://www.lookpolymers.com)**

**Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)**

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

**Address : United North Road 215,Fengxian District, Shanghai City,China**