

## SABIC Innovative Plastics LNP Thermocomp PF006 PA 6 (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , 30% Glass Fiber Filled

### Material Notes:

30% glass fibre reinforced Polyamide 6 injection moulding resin. This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_SABIC-Innovative-Plastics-LNP-Thermocomp-PF006-PA-6-Europe-Africa-Middle-East.php](http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-LNP-Thermocomp-PF006-PA-6-Europe-Africa-Middle-East.php)

Physical Properties	Metric	English	Comments
Density	1.37 g/cc	0.0495 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption at Equilibrium	1.8 %	1.8 %	23 <sup>o</sup> C / 50% RH; ISO 62
Water Absorption at Saturation	6.5 % @Temperature 23.0 <sup>o</sup> C	6.5 % @Temperature 73.4 <sup>o</sup> F	ISO 62
Linear Mold Shrinkage, Flow	0.0020 - 0.0040 cm/cm	0.0020 - 0.0040 in/in	on tensile bar; SABIC Method
Linear Mold Shrinkage, Transverse	0.0080 - 0.011 cm/cm	0.0080 - 0.011 in/in	on tensile bar; SABIC Method

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	111	111	ISO 2039-2
Tensile Strength at Break	160 MPa	23200 psi	5 mm/min; ISO 527
Elongation at Break	3.7 %	3.7 %	5 mm/min; ISO 527
Tensile Modulus	9.50 GPa	1380 ksi	1 mm/min; ISO 527
Flexural Strength	230 MPa	33400 psi	2 mm/min; ISO 178
Flexural Modulus	8.00 GPa	1160 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	9.00 kJ/m <sup>2</sup> @Temperature -30.0 <sup>o</sup> C	4.28 ft-lb/in <sup>2</sup> @Temperature -22.0 <sup>o</sup> F	80*10*4; ISO 180/1A
	9.00 kJ/m <sup>2</sup> @Temperature -40.0 <sup>o</sup> C	4.28 ft-lb/in <sup>2</sup> @Temperature -40.0 <sup>o</sup> F	80*10*4; ISO 180/1A
	10.0 kJ/m <sup>2</sup> @Temperature -20.0 <sup>o</sup> C	4.76 ft-lb/in <sup>2</sup> @Temperature -4.00 <sup>o</sup> F	80*10*4; ISO 180/1A

Mechanical Properties	Metric	English	Comments
	11.0 kJ/m <sup>2</sup> @Temperature 23.0 Â°C	lb/in <sup>2</sup> @Temperature 73.4 Â°F	80*10*4, ISO 180/1A
Charpy Impact Unnotched	7.50 J/cm <sup>2</sup> @Temperature -30.0 Â°C	35.7 ft-lb/in <sup>2</sup> @Temperature -22.0 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
	9.00 J/cm <sup>2</sup> @Temperature 23.0 Â°C	42.8 ft-lb/in <sup>2</sup> @Temperature 73.4 Â°F	Edgew 80*10*4 sp=62mm; ISO 179/1eU
Charpy Impact, Notched	0.900 J/cm <sup>2</sup> @Temperature -30.0 Â°C	4.28 ft-lb/in <sup>2</sup> @Temperature -22.0 Â°F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	1.10 J/cm <sup>2</sup> @Temperature 23.0 Â°C	5.23 ft-lb/in <sup>2</sup> @Temperature 73.4 Â°F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 Âµm/m-Â°C	13.9 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 60.0 Â°C	@Temperature 73.4 - 140 Â°F	
CTE, linear, Transverse to Flow	85.0 Âµm/m-Â°C	47.2 Âµin/in-Â°F	ISO 11359-2
	@Temperature 23.0 - 60.0 Â°C	@Temperature 73.4 - 140 Â°F	
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ft <sup>2</sup> - Â°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	220 Â°C	428 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	205 Â°C	401 Â°F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	215 Â°C	419 Â°F	Rate B/50; ISO 306
	215 Â°C	419 Â°F	Rate B/120; ISO 306
Flammability, UL94	HB	HB	UL 94 by SABIC-IP
	@Thickness 0.750 mm	@Thickness 0.0295 in	
Flame Spread	2.00 mm/min	0.0787 in/min	FMVSS 302
	@Thickness 3.00 mm	@Thickness 0.118 in	
	6.00 mm/min	0.236 in/min	FMVSS 302
	@Thickness 2.00 mm	@Thickness 0.0787 in	

Thermal Properties	Metric	English	Comments
Glow Wire Test	650 Â°C @Thickness 2.00 mm	1200 Â°F @Thickness 0.0787 in	Glow Wire Flammability Index; IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+16 ohm	>= 1.00e+16 ohm	ROA; IEC 60093
Dielectric Constant	3.4 @Frequency 1.00e+6 Hz	3.4 @Frequency 1.00e+6 Hz	IEC 60250
	3.6 @Frequency 50.0 - 60.0 Hz	3.6 @Frequency 50.0 - 60.0 Hz	IEC 60250
Dielectric Strength	20.0 kV/mm @Thickness 3.20 mm	508 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
	0.0061 @Frequency 50.0 - 60.0 Hz	0.0061 @Frequency 50.0 - 60.0 Hz	IEC 60250
Dissipation Factor	0.016 @Frequency 1.00e+6 Hz	0.016 @Frequency 1.00e+6 Hz	IEC 60250
	>= 375 V	>= 375 V	IEC 60112
Comparative Tracking Index	500 V	500 V	IEC 60112

Descriptive Properties	Value	Comments
Ball Pressure Test, 125Â°C +/- 2Â°C	PASSES	IEC 60695-10-2

## 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